

Appendix K
Bioassay Data Validation Report

(Included in its entirety on CD)

DATA QUALITY ASSURANCE REVIEW: PORT ANGELES HARBOR
Sediment Bioassays

DATA QUALITY ASSURANCE REVIEW: PORT ANGELES HARBOR

The following review is based on guidelines found in several publications and guidance manuals for validating sediment bioassays including: the Puget Sound Estuary Program Protocols (PSEP 1995), Sediment Management Standards Marine Bioassays Recommended Quality Assurance and Quality Control Deliverables (Ecology 1996), Sediment Management Annual Review Meeting updates (DMMO 2000), and in Data Validation Guidance Manual for Selected Sediment Variables (PTI 1989). The data reports the results for toxicity tests using the amphipod *Eohaustorius estuarius*, the juvenile polychaete *Neanthes arenaceodentata*, and the larval bioassay using the echinoderm *Dendraster excentricus*. The bioassays were performed on 58 sediment samples as part of the Port Angeles Harbor/Rayonier Mill Sediment Investigation. All bioassays were performed by the Newfields Bioassay Laboratory in Port Gamble, WA. The results of the tests and a detailed discussion of test procedures can be found in the Biological Testing Results for Port Angeles Harbor Sediment Characterization, Port Angeles, WA (Newfields 2008, Appendix D).

Bioassays

The bioassays were conducted on 58 sediment samples which included 55 test samples from the Port Angeles Harbor/Rayonier Mill area and 3 from the Dungeness Bay reference area. The 10-day amphipod test was conducted in five batches with the first batch beginning on July 1, 2008 and the final batch on August 5, 2008. The juvenile polychaete test was run in three batches commencing on June 27, 2008 and the final batch was initiated on August 5, 2008. The echinoderm larval bioassay was conducted in four batches beginning on July 22, 2008 with the final batch initiated on July 31, 2008. The final batch in all three bioassays was conducted under full spectrum lighting as requested by Ecology. The measurement endpoints included mean percent survival for the amphipods, mean mortality and the mean individual growth rate per day for the juvenile polychaete, and the mean normal survival for the larval test. The mean normal survival endpoint for the larval test is that value normalized to the survival in the control sediment (Ecology 2005).

Sample Collection, Transport, and Storage

Samples were collected, transported and stored in accordance with the procedures outlined in the Port Angeles Harbor Sediment Characterization Study, Sampling and Analysis Plan (E&E 2008). Samples were stored in cold room at 4°C at the Newfields Laboratory until initiation of testing.

Data Completeness and Format

Data documenting the environmental conditions, control results, organism response, and conditions influencing data quality were included in the data report provided by the Newfields laboratory.

Data Validation and Assessment

All tests were conducted using randomly assigned identical test chambers with the required amount of test sediment and overlying water. The procedures in all three tests followed the accepted protocols and guidelines including those for water quality.

Amphipod Test

A detailed review of the QA results for each sample batch can be found in Appendix A and D. There were minor deviations from established protocols and guideline in salinity, pH, and temperature in each of the batches run by the laboratory (Table 1). There were no deviations in dissolved oxygen in any of the batches. These deviations were minor and occurred in one or another test chamber on one day of the testing. There was no apparent effect from the deviations on the outcome of the bioassay.

Table 1. Range of water quality parameters that exceeded guidelines.

Parameter	Recommended	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5
Temperature	14°C – 16°C	14.9-16.7	14.6-16.2	14.6-16.4	None	15.1-16.2
Salinity	27-29 ppt	27-31	27-31	None	27-29	28-29
pH	7.3-8.3	7.1-8.7	7.7-8.7	7.7-8.4	7.5-8.6	7.5-8.4

The mean percent survival among amphipods in the control and reference samples met the PSEP and SMS criteria for test acceptability. The recommended survival in control samples is >90 percent, and >75 percent for reference samples. Test results show control survival ranged from 94 to 100 percent, and reference survival from 77 to 97 percent. The percent fines in the three reference sediment stations bracketed the low to mid-high percent fines range of the test sediment, and each test sample was compared to each of the three reference samples for comparison to SMS criteria (Appendix D: Newfields 2008).

Test Precision

Replicate analyses, sample homogenization and amphipod counts were adequately performed to assure for test precision. The detailed test and reference sample standard deviation around the mean mortality can be found on Table 3 in Newfields data report (Appendix D: Newfields 2008). Test sample standard deviation ranged from 0 to 48 percent. The upper range in standard deviations resulted from three stations having one test chamber with an unusually high mortality. In these cases the surrogate results were used for the outlier replicate. These included Stations IH03A, IH06A and MA01A. Two stations were retested as Batch 5 due to high mortality. These included ED04A and IH05A. The standard deviation in the reference samples ranged from 2.7 to 11.5 percent. The standard deviation in the control samples ranged from 0 to 4.2 percent, all were within the acceptable range for the laboratory

Positive Controls

A reference toxicant test using cadmium chloride was conducted concurrently with each batch of tests. The LC-50 ranged from 8.4 to 9.1 mg/L, all were within the acceptable range for the laboratory.

Juvenile Polychaete Test

A detailed review of the QA results for the juvenile polychaete test can be found in Appendix D (Newfields 2008) and in Appendix B

There were minor deviations from established protocols and guideline in temperature in two of the batches run by the laboratory and a minor deviation in dissolved oxygen in one sample for one day (Table 2). These deviations were minor and occurred in one or another test chamber on one day of the testing. There was no apparent effect from the deviations on the outcome of the bioassay.

Table 2. Range of water quality parameters that exceeded guidelines.

Parameter	Recommended	Batch 1	Batch 2	Batch 3
Temperature	19°C – 21°C	18.2-20.4	18.7-20.6	None
Dissolved Oxygen	>6.0 mg/L	None	5.7 (1 day) ≥6.6	None

The mean percent survival among juvenile polychaetes in the control and reference samples met the PSEP and SMS criteria for test acceptability with one exception. The recommended survival in control samples is ≥90 percent and a mean individual growth rate of >0.72 mg/individual/day (MIG). The minimum allowable growth rate in the control sample is >0.38 mg/individual/day. The test results show the growth rate ranged from 0.50 to 0.82 mg/Individual/day. The performance standard for the reference samples are related to the MIG in the control sample. The standard for the reference samples is that the MIG Reference/MIG Control is >80 percent. The ratio varied from 78 to 129 percent. RF03A showed only 78 percent of control growth. This indicates that the results for the reference sediments were acceptable with the one exception. The percent fines in the three reference sediment stations bracketed the low to mid-high percent fines range of the test sediment, and each test sample was compared to each of the three reference samples for comparison to SMS criteria (Appendix D: Newfields 2008).

Test Precision

Replicate analyses, sample homogenization and juvenile polychaete counts were adequately performed to assure for test precision. The detailed test and reference sample standard deviation around the MIG can be found on Table 5 in Newfields data report (Appendix D: Newfields 2008). Test sample mean MIG ranged from 0.30 MIG to 0.80 MIG, while test sample MIG standard deviations ranged from 0.04 to 0.25 mg/ind/day. Reference sample MIG ranged from 0.43 to 0.78 MIG with standard deviation ranging from 0.05 to 0.27 MIG. The growth rate in the control samples was from 0.50 to 0.82 MIG with a standard deviation from 0.11 to 0.17 MIG. The MIG in control and reference

samples were lower than optimum (0.72 MIG) in Batch 2 of the test ranging from 0.43 to 0.65 MIG. However it was greater than the minimum acceptable level for the test of 0.38 MIG.

Positive Controls

A reference toxicant test using cadmium chloride was conducted concurrently with each batch of tests. The LC-50 ranged from 2.7 to 10.3 mg/L. The LC-50 for Batch 2 (2.7mg/L) was lower than the acceptable range for the laboratory (2.9 to 17.7 mg/L) indicating the organisms may have been more sensitive than those previously tested at the laboratory.

Larval Echinoderm Test

A detailed review of the QA results for each sample batch can be found in Appendix C and D. There were minor deviations from established protocols and guideline in temperature and dissolved oxygen in each of the batches run by the laboratory (Table 3). These deviations were minor and occurred in one or another test chamber on one day of the testing. There was no apparent effect from the deviations on the outcome of the bioassay.

Table 3. Range of water quality parameters that exceeded guidelines.

Parameter	Recommended	Batch 1	Batch 2	Batch 3	Batch 4
Temperature	15°C – 17°C	14.8-16.2	14.5-16.2	14.6-16.4	14.7-16.0
Dissolved Oxygen	<6mg/L	3.8-7.8	3.8-7.8	3.8-7.8	5.2-8.1

The mean percent survival among echinoderm larvae in the control and reference samples met the PSEP and SMS criteria for test acceptability. The recommended survival in control samples is >70 percent, and >65 percent for reference samples. Test results show control survival ranged from 84 to 94 percent, and reference survival from 67 to 100 percent. The percent fines in the three reference sediment stations bracketed the low to mid-high percent fines range of the test sediment, and each test sample was compared to each of the three reference samples for comparison to SMS criteria (Appendix D: Newfields 2008).

Test Precision

Replicate analyses, sample homogenization and echinoderm larvae counts were adequately performed to assure for test precision. The detailed test and reference sample standard deviation around the mean normal survival can be found on Table 7 in Newfields data report (Appendix D: Newfields 2008). Test sample standard deviation ranged from 0 to 34.3. The standard deviation in the control samples ranged from 2.3 to 6.0 and from 1.1 to 10.5, at the reference stations. All were within the acceptable range for the laboratory.

Positive Controls

A reference toxicant test using copper sulfate was conducted concurrently with each batch of tests. The LC-50 ranged from 6.8 to 10.8 mg/L, all were within the acceptable range for the laboratory.

Conclusion

The data from the Port Angeles Harbor/Rayonier Mill Sediment Investigation were complete with respect to the data requirements outlined in the project SAP (E&E 2008), the Puget Sound Estuary Program Protocols (PSEP 1995), and in the Sediment Management Standards Marine Bioassays Recommended Quality Assurance and Quality Control Deliverables (Ecology 1996). Despite several minor deviations from established guidelines in temperature and dissolved oxygen in each of the tests the conclusion of this review is that the test results for the amphipod, juvenile polychaete, and larval echinoderm are usable as reported.

REFERENCES

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Ecology. 1996. Sediment Management Standards Marine Bioassays. Task II: Recommended Quality Assurance and Quality Control Deliverables. Prepared for the Washington State Department of Ecology Environmental Review and Sediment Section Olympia, Washington March 1996 Pub. No. 96-314. 18pp.

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PTI. 1989. Data Validation Guidance Manual for Selected Sediment Variables. Prepared for the Washington State Department of Ecology. Olympia, Washington.

APPENDIX A

Check List for the Amphipod Bioassay

CHECKLIST FOR AMPHIPOD MORTALITY BIOASSAY

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 1
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Amphipod Species: <input type="checkbox"/> <i>Rhepoxynius abronius</i> <input type="checkbox"/> <i>Ampelisca abdita</i> <input checked="" type="checkbox"/> <i>Eohaustorius estuarius</i>		
Date Sampled: June 7 – 13, 2008	Received by Lab: June 13, 2008	
Date Analysis Begun: July 1, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Temperature slightly elevated on two occasions at 7 stations, D.O. lower than recommended for 1 day at 1 station due to a loose air hose.		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 14 (11 Test, 3 Ref)	# Samples Analyzed: 15(11 test, 3 reference, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y* <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: <input type="checkbox"/> PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples.	

FORMAT

Standard data report sheet (check off)	
Number of amphipods reported for each replicate: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Percent mortality reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Daily emergence taken for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
	Reference samples: <input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	
Salinity (daily): <input checked="" type="checkbox"/>	
Dissolved oxygen (daily): <input checked="" type="checkbox"/>	pH (daily): <input checked="" type="checkbox"/>
Temperature (daily): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	

QA/QC Samples Batch 1

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 2 Percent
Exceed PSEP QA Limit of 10%? (Y/N): No
Exceed PSEP QA Limit of >20% individual replicate mortality? (Y/N): N

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Reference grain size appropriate for test species? Yes, Bracketed grain size of Test Stations
Mean Mortality: RF01A- 6%, RF02A - 6%, RF03A - 11%
Mean mortality exceeds PSEP QA limit of >20% over control? (Y/N): N

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 mg Cd/L
% mortality/exposure concentration: 7%, 13%, 27%, 57%, 100%, 100%
Organism Response (LC50): 8.8 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 3 – 13.1 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Water Quality

Rhepoxynus abronius

Samples with temperature <14 or >16° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Ampelisca abdita

Samples with temperature <19 or >21° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Eohaustorius estuarius

Samples with temperature <14 or >16°C: 14.9 – 16.7, 7 each stations exceeded 16°C on 1 day of the test.
Samples with salinity other than ambient interstitial salinity of test sediment: None
Samples with pH <7 or >9: None, 7.1 - 8.7 ppt
Samples with DO <6 mg/L: None, 8.2 – 9.2 mg/L

CHECKLIST FOR AMPHIPOD MORTALITY BIOASSAY

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 2
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Amphipod Species: <input type="checkbox"/> <i>Rhepoxynius abronius</i> <input type="checkbox"/> <i>Ampelisca abdita</i> <input checked="" type="checkbox"/> <i>Eohaustorius estuarius</i>		
Date Sampled: June 11 – 22, 2008	Received by Lab: June 23, 2008	
Date Analysis Begun: July 15, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Temperature slightly elevated on one occasions at 3 stations		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 28 (25 Test, 3 Ref)	# Samples Analyzed: 29 (25 test, 3 reference, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y* <input type="checkbox"/> N PSEP; 4°C under nitrogen <2 weeks: <input type="checkbox"/> PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>	
If no, identify samples.	

FORMAT

Standard data report sheet (check off)	
Number of amphipods reported for each replicate: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Percent mortality reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Daily emergence taken for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
	Reference samples: <input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	
Salinity (daily): <input checked="" type="checkbox"/>	
Dissolved oxygen (daily): <input checked="" type="checkbox"/>	pH (daily): <input checked="" type="checkbox"/>
Temperature (daily): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	

QA/QC Samples Batch 2

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 6 Percent
Exceed PSEP QA Limit of 10%? (Y/N): N
Exceed PSEP QA Limit of >20% individual replicate mortality? (Y/N): N

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Reference grain size appropriate for test species? Yes, Bracketed grain size of Test Stations
Mean Mortality: RF01A- 5%, RF02A 2%, RF03A 11%
Mean mortality exceeds PSEP QA limit of >20% over control? (Y/N): N

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 mg Cd/L
% mortality/exposure concentration: 7%, 10%, 27%, 57%, 100%, 100%
Organism Response (LC50): 8.4 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 3.1 – 12.2 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Water Quality

Rhepoxynus abronius

Samples with temperature <14 or >16° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Ampelisca abdita

Samples with temperature <19 or >21° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Eohaustorius estuarius

Samples with temperature <14 or >16°C: 14.7 – 16.2, 4 stations exceeded 16°C by 0.1°C on 1 day of the test. 1 station exceeded 16°C by as much as 0.2°C on 3 nonconsecutive days of the test
Samples with salinity other than ambient interstitial salinity of test sediment: None
Samples with pH <7 or >9: None - 7.1 8.7 ppt
Samples with DO <6 mg/L: None - 8.2 – 9.2 mg/L

CHECKLIST FOR AMPHIPOD MORTALITY BIOASSAY

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 3
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Amphipod Species: <input type="checkbox"/> <i>Rhepoxynius abronius</i> <input type="checkbox"/> <i>Ampelisca abdita</i> <input checked="" type="checkbox"/> <i>Eohaustorius estuarius</i>		
Date Sampled: June 18 – 22, 2008	Received by Lab: June 23, 2008	
Date Analysis Begun: July 25, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Water bath temperature malfunctioned on day 2 of the test temperature rose as much as 1.8°C. Repaired immediately. 7 station exceeded 16°C by as much as 0.4°C on day 0 of the test.		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 13 (10 Test, 3 Ref)	# Samples Analyzed: 14 (10 test, 3 reference, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y* <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: <input type="checkbox"/> PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples.	

FORMAT

Standard data report sheet (check off)	
Number of amphipods reported for each replicate: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Percent mortality reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Daily emergence taken for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
	Reference samples: <input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	
Salinity (daily): <input checked="" type="checkbox"/>	
Dissolved oxygen (daily): <input checked="" type="checkbox"/>	pH (daily): <input checked="" type="checkbox"/>
Temperature (daily): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	

QA/QC Samples Batch 3

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 6 Percent
Exceed PSEP QA Limit of 10%? (Y/N): N
Exceed PSEP QA Limit of >20% individual replicate mortality? (Y/N): N

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Reference grain size appropriate for test species? Yes, Bracketed grain size of Test Stations
Mean Mortality: RF01A- 6%, RF02A 10%, RF03A 23%
Mean mortality exceeds PSEP QA limit of >20% over control? (Y/N): N

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 mg Cd/L
% mortality/exposure concentration: 3%, 7%, 17%, 40%, 97%, 100%
Organism Response (LC50): 8.8 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 3.1 – 12.2 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Water Quality

Rhepoxynus abronius
Samples with temperature <14 or >16° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Ampelisca abdita
Samples with temperature <19 or >21° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Eohaustorius estuarius
Samples with temperature <14 or >16°C: 14.7 – 17.8. All samples in batch exceeded 16.0°C by as much as 1.8°C on day 2 due to a malfunctioning of water bath temperature control. Repaired immediately and temperature decrease to below 16°C. 7 station exceeded 16°C by as much as 0.4°C on day 0 of the test
Samples with salinity other than ambient interstitial salinity of test sediment: None 28 – 29 ppt
Samples with pH <7 or >9: None - 7.7 – 8.5
Samples with DO <6 mg/L: None – 6.5 – 8.5 mg/L

CHECKLIST FOR AMPHIPOD MORTALITY BIOASSAY

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 4 UV samples
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Amphipod Species: <input type="checkbox"/> <i>Rhepoxynius abronius</i> <input type="checkbox"/> <i>Ampelisca abdita</i> <input checked="" type="checkbox"/> <i>Eohaustorius estuarius</i>		
Date Sampled: June 16 – 22 and July 23, 2008		Received by Lab: June 23, 2008 and July 26, 2008
Date Analysis Begun: August 5, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Samples were treated to UV light per instructions from Ecology		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 13 (10 Test, 3 Ref)	# Samples Analyzed: 14 (10 test, 3 reference, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y* <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: <input type="checkbox"/> PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples.	

FORMAT

Standard data report sheet (check off)	
Number of amphipods reported for each replicate: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Percent mortality reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Daily emergence taken for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
	Reference samples: <input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	
Salinity (daily): <input checked="" type="checkbox"/>	
Dissolved oxygen (daily): <input checked="" type="checkbox"/>	pH (daily): <input checked="" type="checkbox"/>
Temperature (daily): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	

QA/QC Samples Batch 4 UV

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 0 Percent
Exceed PSEP QA Limit of 10%? (Y/N): N
Exceed PSEP QA Limit of >20% individual replicate mortality? (Y/N): N

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Reference grain size appropriate for test species? Yes, Bracketed grain size of Test Stations
Mean Mortality: RF01A- 5%, RF02A 4%, RF03A 12%
Mean mortality exceeds PSEP QA limit of >20% over control? (Y/N): N

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 mg Cd/L
% mortality/exposure concentration: 6%, 10%, 13%, 60%, 100%, 100%
Organism Response (LC50): 9.1 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 3.4 – 11.3 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Water Quality

Rhepoxynus abronius
Samples with temperature <14 or >16° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Ampelisca abdita
Samples with temperature <19 or >21° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Eohaustorius estuarius
Samples with temperature <14 or >16°C: 14.7 – 16.0
Samples with salinity other than ambient interstitial salinity of test sediment: None 27 – 29 ppt
Samples with pH <7 or >9: None - 7.5 – 8.6
Samples with DO <6 mg/L: None – 7.8 – 9.7 mg/L

CHECKLIST FOR AMPHIPOD MORTALITY BIOASSAY

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 5, Retest of 2 samples
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Amphipod Species: <input type="checkbox"/> <i>Rhepoxynius abronius</i> <input type="checkbox"/> <i>Ampelisca abdita</i> <input checked="" type="checkbox"/> <i>Eohaustorius estuarius</i>		
Date Sampled: June 16 and June 20, 2008		Received by Lab: June 23, 2008
Date Analysis Begun: August 5, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems):		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 5 (2 Test, 3 Ref)	# Samples Analyzed: 6 (2 test, 3 reference, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y* <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: <input type="checkbox"/> PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples.	

FORMAT

Standard data report sheet (check off)	
Number of amphipods reported for each replicate: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Percent mortality reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Daily emergence taken for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
	Reference samples: <input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	
Salinity (daily): <input checked="" type="checkbox"/>	
Dissolved oxygen (daily): <input checked="" type="checkbox"/>	pH (daily): <input checked="" type="checkbox"/>
Temperature (daily): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	

QA/QC Samples Batch 5 Retest**Negative Control**

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 2 Percent
Exceed PSEP QA Limit of 10%? (Y/N): N
Exceed PSEP QA Limit of >20% individual replicate mortality? (Y/N): N

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Reference grain size appropriate for test species? Yes, Bracketed grain size of Test Stations
Mean Mortality: RF01A- 3%, RF02A 3%, RF03A 5%
Mean mortality exceeds PSEP QA limit of >20% over control? (Y/N): N

Positive Controls Samples were retested at same time as Batch 4 UV

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 mg Cd/L
% mortality/exposure concentration: 6%, 10%, 13%, 60%, 100%, 100%
Organism Response (LC50): 9.1 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 3.4 – 11.3 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Water Quality

Rhepoxynus abronius
Samples with temperature <14 or >16° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Ampelisca abdita
Samples with temperature <19 or >21° C
Samples with salinity <27 or >29 ppt
Samples with pH <7 or >9
Samples with DO <6 mg/L

Eohaustorius estuarius
Samples with temperature <14 or >16°C: 15.1 – 16.2. 2 Stations exceeded 16°C by 0.2°C.
Samples with salinity other than ambient interstitial salinity of test sediment: None 28 – 29 ppt.
Samples with pH <7 or >9: None - 7.5 – 8.4
Samples with DO <6 mg/L: Station ED04A had D.O. less than 6 mg/L on Day 4 of the test.

APPENDIX B

Check List for the 20-Day Neanthes Juvenile Polychaete Bioassay

CHECKLIST FOR 20-DAY NEANTHES BIOASSAY

Project Name: : Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 1
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: June 7 – June 17, 2008	Received by Lab: June 18, 2008	
Date Analysis Begun: June 27, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems):		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 28 (25 test, 3 ref)	# Samples Analyzed: 29 (25 test, 3 ref, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)	
Initial biomass for 3 groups of 5 worms each: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Number of worms reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Percent Mortality reported for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
Final biomass reported for each replicate: <input checked="" type="checkbox"/>	Reference samples: <input checked="" type="checkbox"/>
Final Mean Growth Rate reported for each replicate : <input checked="" type="checkbox"/>	
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	Seawater change every three days? <input checked="" type="checkbox"/>
Dissolved oxygen (every third day): <input checked="" type="checkbox"/>	Salinity (every third day): <input checked="" type="checkbox"/>
Temperature (every third day): <input checked="" type="checkbox"/>	pH (every third day): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Worms fed every second day: <input checked="" type="checkbox"/>	Interstitial ammonia/sulfides (day 0, 20): <input checked="" type="checkbox"/>

QA/QC Samples: Batch 1

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 0 percent
Exceed PSEP QA Limit of 10%? No
Mean Control Biomass (mg/individual): 0.672
Mean Control Growth Rate (mg/individual/day): 0.720

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0,1.875, 3.765, 7.5, 15, 30:
% mortality/exposure concentration: 0%, 1.7%, 3%, 3%, 100%, 100%
Organism Response (LC50): 10.3 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 2.8 – 17.4 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Mean Mortality: RF01A- 0%, RF02A 4%, RF03A 16%
Mean mortality >20% over control? (Y/N): N
Mean Growth Rate (mg/individual/day): 0.682, 0.713, 0.561
Mean growth rate less than PSDDA QA limit of >80% of the control? N

Water Quality

Samples with temperature <19 or >21°C: 18.2 - 21°C. 4 Stations had temperatures between 18 and 19°C on 1 day of the test.
Samples with salinity <26 or >30 ppt: 27 – 3 ppt, 2 Stations had of 31 ppt on one day of the test.
Samples with pH <7.0 or >9.0: None, 7.2 – 8.9
Samples with DO <6 mg/L: None 6.2 – 8.2.

CHECKLIST FOR 20-DAY NEANTHES BIOASSAY

Project Name: : Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 2
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: June 16 – June 22, 2008	Received by Lab: June 23, 2008	
Date Analysis Begun: July 17, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems):		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 24 (21 test, 3 ref)	# Samples Analyzed: 25 (21 test, 3 ref, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)	
Initial biomass for 3 groups of 5 worms each: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Number of worms reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Percent Mortality reported for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
Final biomass reported for each replicate: <input checked="" type="checkbox"/>	Reference samples: <input checked="" type="checkbox"/>
Final Mean Growth Rate reported for each replicate : <input checked="" type="checkbox"/>	
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates: Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	Seawater change every three days? <input checked="" type="checkbox"/>
Dissolved oxygen (every third day): <input checked="" type="checkbox"/>	Salinity (every third day): <input checked="" type="checkbox"/>
Temperature (every third day): <input checked="" type="checkbox"/>	pH (every third day): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Worms fed every second day: <input checked="" type="checkbox"/>	Interstitial ammonia/sulfides (day 0, 20): <input checked="" type="checkbox"/>

QA/QC Samples: Batch 2

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 0 percent
Exceed PSEP QA Limit of 10%? No
Mean Control Biomass (mg/individual): 0.511
Mean Control Growth Rate (mg/individual/day): 0.500

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0,1.875, 3.765, 7.5, 15, 30:
% mortality/exposure concentration: 7%, 20.0%, 86%, 100%, 100%, 100%
Organism Response (LC50): 2.7 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 2.9 – 17.7 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Mean Mortality: RF01A- 0%, RF02A 0%, RF03A 0%
Mean mortality >20% over control? (Y/N): N
Mean Growth Rate (mg/individual/day): 0.650, 0.43, 0.480
Mean growth rate less than PSDDA QA limit of >80% of the control? N

Water Quality

Samples with temperature <19 or >21°C: 18.7 – 20.6°C. 12 Stations had temperatures between 18.7 and 19°C on day 4 of the test.
Samples with salinity <26 or >30 ppt: None 27 – 30 ppt,
Samples with pH <7.0 or >9.0: None, 7.5 – 8.7
Samples with DO <6 mg/L: 5.7 – 7.9 mg/L. One station had D.O. at 5.7 mg/L on day 0 of the test.

CHECKLIST FOR 20-DAY NEANTHES BIOASSAY

Project Name: : Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: Newfields	Lab #:	Batch: 3 UV Samples
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: June 16 – June 21, 2008 and July 23, 2008	Received by Lab: June 23, 2008 and July 27, 2008	
Date Analysis Begun: August 5, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems):		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 13 (10 test, 3 ref)	# Samples Analyzed: 14 (10 test, 3 ref, 1 control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)	
Initial biomass for 3 groups of 5 worms each: <input checked="" type="checkbox"/>	Field samples: <input checked="" type="checkbox"/>
Number of worms reported for each replicate: <input checked="" type="checkbox"/>	Positive controls: <input checked="" type="checkbox"/>
Percent Mortality reported for each replicate: <input checked="" type="checkbox"/>	Negative controls: <input checked="" type="checkbox"/>
Final biomass reported for each replicate: <input checked="" type="checkbox"/>	Reference samples: <input checked="" type="checkbox"/>
Final Mean Growth Rate reported for each replicate : <input checked="" type="checkbox"/>	
Individual replicate, plus sample mean and standard deviations for mortality? <input checked="" type="checkbox"/>	
Analytical Replicates: Five	
Number per sample: Seven (5 Test, 1 Water quality Replicate, 1 Day 0 sacrificial Beaker)	
Any <5 replicates? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Water Quality Variable Reported for each Replicate (check)	
Interstitial salinity for each sample (initiation): <input checked="" type="checkbox"/>	Seawater change every three days? <input checked="" type="checkbox"/>
Dissolved oxygen (every third day): <input checked="" type="checkbox"/>	Salinity (every third day): <input checked="" type="checkbox"/>
Temperature (every third day): <input checked="" type="checkbox"/>	pH (every third day): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>
Worms fed every second day: <input checked="" type="checkbox"/>	Interstitial ammonia/sulfides (day 0, 20): <input checked="" type="checkbox"/>

QA/QC Samples: Batch 3-UV

Negative Control

Control Sediment Collection Site: Yaquina Bay, OR
Water Source: North Hood Canal, Sand Filtered
Current priority pollutant scan available? Available
Mean Control Mortality (%) 0 percent
Exceed PSEP QA Limit of 10%? No
Mean Control Biomass (mg/individual): 0.555
Mean Control Growth Rate (mg/individual/day): 0.820

Positive Controls

Reference Toxicant: Cadmium Chloride
Exposure Concentrations: 0,1.875, 3.765, 7.5, 15, 30:
% mortality/exposure concentration: 3%, 13.0%, 13.0%, 93%, 100%, 100%
Organism Response (LC50): 5.3 mg Cd/L
Laboratory Performance Standards for Reference Toxicant: 2.5 – 18.3 mg Cd/L
Did the test LC50 fall within lab standards? (Y/N): Y

Reference Sediment

Collection Site: Dungeness Bay, WA
Total Number of Analyses: 3, RF01A, RF02A, RF03A
Mean Mortality: RF01A- 0%, RF02A 0%, RF03A 4%
Mean mortality >20% over control? (Y/N): N
Mean Growth Rate (mg/individual/day): 0.750, 0.78, 0.68
Mean growth rate less than PSDDA QA limit of >80% of the control? N

Water Quality

Samples with temperature <19 or >21°C: None. 19.2 – 21.0°C
Samples with salinity <26 or >30 ppt: None 27 – 29 ppt,
Samples with pH <7.0 or >9.0: None, 7.7 – 8.5
Samples with DO <6 mg/L: None. 7.4 – 8.9 mg/L.

APPENDIX C

Check List for the Larval Echinoderm Bioassay

CHECKLIST FOR SEDIMENT LARVAL BIOASSAY (SOLID PHASE)

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: : Newfields	Lab #:	Batch: 1
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: : June 7 – June 13, 2008	Received by Lab: June 13, 2008	
Date Analysis Begun: July 22, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Dissolved Oxygen between 3.8 and 5.9 mg/L at 17 stations during test. Temperature slightly low at three stations during test.		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 20 (17 Test, 3 Ref)	# Samples Analyzed: 21 (17 Test, 3 Ref, 1 Control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)			
Number of larvae evaluated:	<input checked="" type="checkbox"/>	Field samples:	<input checked="" type="checkbox"/>
Percent mortality/abnormality reported for each replicate:	<input checked="" type="checkbox"/>	Positive controls:	<input checked="" type="checkbox"/>
Percent abnormality reported for each replicate:	<input checked="" type="checkbox"/>	Negative controls:	<input checked="" type="checkbox"/>
		Reference samples:	<input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality & abnormality? <input checked="" type="checkbox"/>			
Analytical Replicates: Five			
Number per sample: Six (5 Test, 1 Water quality Replicate)			
Any <5 replicates? No			
Water Quality Variable Reported for each Replicate (check)			
Dissolved oxygen (daily):	<input checked="" type="checkbox"/>	Salinity (daily):	<input checked="" type="checkbox"/>
Temperature (daily):	<input checked="" type="checkbox"/>	pH (daily):	<input checked="" type="checkbox"/>
Ammonia (initiation and termination):	<input checked="" type="checkbox"/>	Sulfide (initiation and termination):	<input checked="" type="checkbox"/>

QA/QC Samples Batch 1

Negative Control

Water Source: : North Hood Canal, um-filtered, UV treated, Adjusted with DI water

Current priority pollutant scan available? Available

Mean Control Mortality (%): 16%

Exceed PSDDA/PSEP QA Limit of 30%? (Y/N): No

Reference Sediment

Collection Site: : Dungeness Bay, WA

Total Number of Analyses: 3, RF01A, RF02A, RF03A

Mean Mortality/Abnormality: RF01A - 9%, RF02A – 11%, RF03A – 27%

Mean mortality & abnormality >35% over control? (Y/N) No

Standard deviation of reference sediment >20% (Y/N) No

If yes to above, is power of reference vs. control >0.6%? (Y/N)

Positive Controls

Reference Toxicant: Copper Sulfate

Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 ug/L

% mortality/exposure concentration: 23%, 28%, 37%, 88%, 100%, 100%

Organism Response (EC-50): 6.8 ugCu/L

Laboratory Performance Standards for Reference Toxicant: 5.4 – 18.6ugCU/L

Did the test EC-50 fall within lab standards? (Y/N): Yes

Water Quality

Dendraster sp.

Samples with temperature <15 or >17°C: 14.8 – 16.2°C, 3 Stations on 1 day had temperatures 0.2°C <15°C

Samples with salinity <27 or >29 ppt: None, 28 – 29 ppt

Samples with pH <7 or >9: None, 7.3 – 8.3

Samples with DO <6 mg/L: 3.8 - 7.8 mg/L. 17 Station had D.O. from 3.8 – 5.9 mg/L on days 2 and 3.

CHECKLIST FOR SEDIMENT LARVAL BIOASSAY (SOLID PHASE)

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: : Newfields	Lab #:	Batch: 2
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: : June 13 – June 17, 2008	Received by Lab: June 18, 2008	
Date Analysis Begun: July 25, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Dissolved Oxygen between 4.4 and 6.0 at 6 stations during test. Temperature slightly low at one station during test.		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 20 (17 Test, 3 Ref)	# Samples Analyzed: 21 (17 Test, 3 Ref, 1 Control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)	
Number of larvae evaluated:	<input checked="" type="checkbox"/>
Percent mortality/abnormality reported for each replicate:	<input checked="" type="checkbox"/>
Percent abnormality reported for each replicate:	<input checked="" type="checkbox"/>
Field samples:	<input checked="" type="checkbox"/>
Positive controls:	<input checked="" type="checkbox"/>
Negative controls:	<input checked="" type="checkbox"/>
Reference samples:	<input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality & abnormality? <input checked="" type="checkbox"/>	
Analytical Replicates: Five	
Number per sample: Six (5 Test, 1 Water quality Replicate)	
Any <5 replicates? No	
Water Quality Variable Reported for each Replicate (check)	
Dissolved oxygen (daily):	<input checked="" type="checkbox"/>
Temperature (daily):	<input checked="" type="checkbox"/>
Ammonia (initiation and termination):	<input checked="" type="checkbox"/>
Salinity (daily):	<input checked="" type="checkbox"/>
pH (daily):	<input checked="" type="checkbox"/>
Sulfide (initiation and termination):	<input checked="" type="checkbox"/>

QA/QC Samples Batch 2

Negative Control

Water Source: : North Hood Canal, um-filtered, UV treated, Adjusted with DI water

Current priority pollutant scan available? Available

Mean Control Mortality (%): 7%

Exceed PSDDA/PSEP QA Limit of 30%? (Y/N): No

Reference Sediment

Collection Site: : Dungeness Bay, WA

Total Number of Analyses: 3, RF01A, RF02A, RF03A

Mean Mortality/Abnormality: RF01A - 10%, RF02A - 12%, RF03A - 20%

Mean mortality & abnormality >35% over control? (Y/N) No

Standard deviation of reference sediment >20% (Y/N) No

If yes to above, is power of reference vs. control >0.6%? (Y/N)

Positive Controls

Reference Toxicant: Copper Sulfate

Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 ug/L

% mortality/exposure concentration: 10%, 19%, 25%, 87%, 99%, 100%

Organism Response (EC-50): 6.8 ugCu/L

Laboratory Performance Standards for Reference Toxicant: 5.6 - 17.7ugCU/L

Did the test EC-50 fall within lab standards? (Y/N): Yes

Water Quality

Dendraaster sp.

Samples with temperature <15 or >17°C: 14.5 - 16.2°C, One Station on 1 day had a temperature 0.5°C<15°C

Samples with salinity <27 or >29 ppt: None, 28 ppt, Constant

Samples with pH <7 or >9: None, 7.6 - 8.2

Samples with DO <6 mg/L: 3.8 - 7.8 mg/L. 18 Stations had D.O. from 4.4 - 5.9 mg/L on days 0, 1, 2, and 3.

CHECKLIST FOR SEDIMENT LARVAL BIOASSAY (SOLID PHASE)

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: : Newfields	Lab #:	Batch: 3
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: : June 19 – June 22, 2008	Received by Lab: June 23, 2008	
Date Analysis Begun: July 31, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Minor temperature variations at numerous stations at test initiation. Dissolved oxygen was low at 8 stations (<6 mg/L) during the test. Recommended D.O. > 4.8 mg/L - 7 stations < 4.8. on last day of test		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 15 (12 Test, 3 Ref)	# Samples Analyzed: 16 (12 Test, 3 Ref, 1 Control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)	
Number of larvae evaluated:	<input checked="" type="checkbox"/> Field samples: <input checked="" type="checkbox"/>
Percent mortality/abnormality reported for each replicate:	<input checked="" type="checkbox"/> Positive controls: <input checked="" type="checkbox"/>
Percent abnormality reported for each replicate:	<input checked="" type="checkbox"/> Negative controls: <input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Reference samples: <input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality & abnormality? <input checked="" type="checkbox"/>	
Analytical Replicates: Five	
Number per sample: Six (5 Test, 1 Water quality Replicate)	
Any <5 replicates? No	
Water Quality Variable Reported for each Replicate (check)	
Dissolved oxygen (daily): <input checked="" type="checkbox"/>	Salinity (daily): <input checked="" type="checkbox"/>
Temperature (daily): <input checked="" type="checkbox"/>	pH (daily): <input checked="" type="checkbox"/>
Ammonia (initiation and termination): <input checked="" type="checkbox"/>	Sulfide (initiation and termination): <input checked="" type="checkbox"/>

QA/QC Samples Batch 3

Negative Control

Water Source: : North Hood Canal, um-filtered, UV treated, Adjusted with DI water

Current priority pollutant scan available? Available

Mean Control Mortality (%): 9%

Exceed PSDDA/PSEP QA Limit of 30%? (Y/N): No

Reference Sediment

Collection Site: : Dungeness Bay, WA

Total Number of Analyses: 3, RF01A, RF02A, RF03A

Mean Mortality/Abnormality: RF01A - 6%, RF02A - 13%, RF03A - 33%

Mean mortality & abnormality >35% over control? (Y/N) No

Standard deviation of reference sediment >20% (Y/N) No

If yes to above, is power of reference vs. control >0.6%? (Y/N)

Positive Controls

Reference Toxicant: Copper Sulfate

Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 ug/L

% mortality/exposure concentration: 9%, 8%, 16%, 44%, 96%, 100%

Organism Response (EC-50): 10.8 ug Cu/L

Laboratory Performance Standards for Reference Toxicant: 5.4 - 17.3 ug Cu/L

Did the test EC-50 fall within lab standards? (Y/N): Yes

Water Quality

Dendraaster sp.

Samples with temperature <15 or >17°C: 14.3 - 15.6°C, 15 Stations on 1 day had a temperature 0.5°C<15°C

Samples with salinity <27 or >29 ppt: None, 28 ppt, Constant

Samples with pH <7 or >9: None, 7.4 - 7.9

Samples with DO <6 mg/L: 3.8 - 7.8 mg/L. 8 Stations had D.O. from 3.8 - 5.9 mg/L on days 0, 1, 2, and 3.

CHECKLIST FOR SEDIMENT LARVAL BIOASSAY (SOLID PHASE)

Project Name: Port Angeles Sediment Investigation		Project #: 002330.WD20
Laboratory: : Newfields	Lab #:	Batch: 4 UV
Responsible Technician: Brian Hester		Reviewed by: P.L. Striplin
Date Sampled: June 89 – June 22, 2008 and July 23, 2008		Received by Lab: June 23, 2008 & July 26, 2008
Date Analysis Begun: July 31, 2008		
Problems noted (e.g., deviations from prescribed methods, analytical problems): Minor variations in Temperature and dissolved oxygen		

COMPLETENESS AND HOLDING CONDITIONS

# Samples Submitted: 12 (9 Test, 3 Ref)	# Samples Analyzed: 13 (9 Test, 3 Ref, 1 Control)
Holding Conditions Acceptable: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	PSEP; 4°C under nitrogen <2 weeks: PSDDA; 4°C under nitrogen <8 weeks: <input checked="" type="checkbox"/>
If no, identify samples:	

FORMAT

Standard data report sheet (check off)	
Number of larvae evaluated:	<input checked="" type="checkbox"/>
Percent mortality/abnormality reported for each replicate:	<input checked="" type="checkbox"/>
Percent abnormality reported for each replicate:	<input checked="" type="checkbox"/>
Field samples:	<input checked="" type="checkbox"/>
Positive controls:	<input checked="" type="checkbox"/>
Negative controls:	<input checked="" type="checkbox"/>
Reference samples:	<input checked="" type="checkbox"/>
Individual replicate, plus sample mean and standard deviations for mortality & abnormality? <input checked="" type="checkbox"/>	
Analytical Replicates: Five	
Number per sample: Six (5 Test, 1 Water quality Replicate)	
Any <5 replicates? No	
Water Quality Variable Reported for each Replicate (check)	
Dissolved oxygen (daily):	<input checked="" type="checkbox"/>
Temperature (daily):	<input checked="" type="checkbox"/>
Ammonia (initiation and termination):	<input checked="" type="checkbox"/>
Salinity (daily):	<input checked="" type="checkbox"/>
pH (daily):	<input checked="" type="checkbox"/>
Sulfide (initiation and termination):	<input checked="" type="checkbox"/>

QA/QC Samples Batch 4 UV

Negative Control

Water Source: : North Hood Canal, um-filtered, UV treated, Adjusted with DI water

Current priority pollutant scan available? Available

Mean Control Mortality (%): 6%

Exceed PSDDA/PSEP QA Limit of 30%? (Y/N): No

Reference Sediment

Collection Site: : Dungeness Bay, WA

Total Number of Analyses: 3, RF01A, RF02A, RF03A

Mean Mortality/Abnormality: RF01A - 0%, RF02A - 4%, RF03A - 12%

Mean mortality & abnormality >35% over control? (Y/N) No

Standard deviation of reference sediment >20% (Y/N) No

If yes to above, is power of reference vs. control >0.6%? (Y/N)

Positive Controls

Reference Toxicant: Copper Sulfate

Exposure Concentrations: 0, 2.5, 5, 10, 20, 40 ug/L

% mortality/exposure concentration: 9%, 8%, 16%, 44%, 96%, 100%

Organism Response (EC-50): 10.8 ug Cu/L

Laboratory Performance Standards for Reference Toxicant: 5.4 - 17.3 ug Cu/L

Did the test EC-50 fall within lab standards? (Y/N): Yes

Water Quality

Dendraaster sp.

Samples with temperature <15 or >17°C: 14.9 - 16.4°C, 1 Station on 1 day had a temperature 0.1°C<15°C

Samples with salinity <27 or >29 ppt: None, 28 ppt, Constant

Samples with pH <7 or >9: None, 7.4 - 8.0

Samples with DO <6 mg/L: 5.2 - 8.1 mg/L. 2 Stations had D.O. as much as 0.8 mg/L<6 mg/L on days 1 & 3.

APPENDIX D

Biological Testing Results for the Port Angeles Harbor Sediment Investigation
Newfields 2008

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

OCTOBER 2008

PREPARED FOR:
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1.0 INTRODUCTION

NewFields conducted toxicity tests with sediment samples collected in Port Angeles Harbor 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 Ecology and Environment, Inc. (E&E). 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 Port Angeles Harbor 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 and the benthic larval test.

2.1 SAMPLE COLLECTION

Test sediment was collected from Port Angeles by E&E on between June 6 and 22, 2008. Reference sediment was collected from three sites on June 10, 2008.

2.2 SAMPLE AND ANIMAL RECEIPT

Fifty-five 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.

Amphipods (*Eohaustorius estuarius*) were supplied by Northwest Aquatic Sciences in Newport, Oregon. Animals were 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). *Dendraster excentricus* (sand dollar) broodstock were collected by NewFields staff from the northernHood Canal, Washington. Broodstock were held in unfiltered seawater from Hood Canal prior to spawning.

Native *Eohaustorius* sediment from Yaquina Bay, Oregon was also provided by Northwest Aquatic Sciences for use as control sediment treatments for the amphipod and juvenile polychaete tests.

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. Separate batches for each test organism were used for this modification to the standard testing protocols. 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 SEDIMENT ACCLIMATION

One sample (EC01A) was collected in a location with salinity below the tolerance range of the marine test organisms. To ensure that this factor did not contribute to test organism failure, the sediment was tested as collected and treated in the same manner as all other test sediments (EC01A unacclimated). A second test treatment allowed the sediment to acclimate to marine conditions for 14 days prior to initiating the test (EC01A acclimated). Both samples were tested concurrently in the same batch per species under UV light exposure.

2.5 SAMPLE BATCHING

The fifty-five sediment samples and the three reference samples were run in batches as shown in Table 1. Four batches were run for the amphipod and larval tests; the polychaete test was performed on three batches. UV light exposure was applied to the last batch for each species. All tests were initiated within the 8-week holding time.

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)		
			<i>E. estuarius</i>	<i>N. arenaceodentata</i>	<i>D. excentricus</i>
RF01A	6/10/2008	6/11/2008	1,2,3,4	1,2,3	1,2,3,4
RF02A	6/10/2008	6/11/2008	1,2,3,4	1,2,3	1,2,3,4
RF03A	6/10/2008	6/11/2008	1,2,3,4	1,2,3	1,2,3,4
BA01A	6/7/2008	6/10/2008	1	1	1
BL01A	6/19/2008	6/23/2008	2	2	2
BL02A	6/13/2008	6/13/2008	2	1	2
BL03A	6/13/2008	6/13/2008	2	1	2
BL04A	6/13/2008	6/13/2008	2	1	2
BL06A	6/11/2008	6/13/2008	2	1	1
CO01A	6/22/2008	6/23/2008	4	3	4
CO02A	6/22/2008	6/23/2008	2	2	3
CO04A	6/20/2008	6/23/2008	4	3	4
DO03A	6/19/2008	6/23/2008	2	2	3
DO04A	6/19/2008	6/23/2008	2	2	3
DO05A	6/19/2008	6/23/2008	3	2	3
EC01A Acc	6/21/2008	6/23/2008	4	3	4
EC01A Unacc	6/21/2008	6/23/2008	4	3	4
EC02A	6/21/2008	6/23/2008	4	3	4
EC04A	6/20/2008	6/23/2008	3	2	3
ED03A	6/20/2008	6/23/2008	3	2	3
ED04A	6/20/2008	6/23/2008	3, 5	2	3
ED05A	6/20/2008	6/23/2008	3	2	3
EH02A	6/7/2008	6/10/2008	1	1	1
EI02A	6/18/2008	6/18/2008	4	3	4
EI07A	6/18/2008	6/18/2008	3	2	2
FP01A	6/7/2008	6/10/2008	1	1	1
FT01A	6/17/2008	6/18/2008	2	1	2
FT04A	6/17/2008	6/18/2008	2	1	2
FT06A	6/12/2008	6/13/2008	2	1	1
FT11A	6/12/2008	6/13/2008	2	1	1
IE03A	6/7/2008	6/10/2008	1	1	1
IE04A	6/8/2008	6/10/2008	1	1	1
IE06A	6/8/2008	6/10/2008	1	1	1
IE07A	6/16/2008	6/18/2008	4	3	4
IE09A	6/16/2008	6/18/2008	2	1	2
IE14A	6/9/2008	6/10/2008	1	1	1
IE15A	6/9/2008	6/13/2008	1	1	1
IH01A	6/16/2008	6/18/2008	2	1	2

Sample	Date Collected	Date Received	Test Batch Number (Initiation Dates Shown Below)		
			<i>E. estuarius</i>	<i>N. arenaceodentata</i>	<i>D. excentricus</i>
IH02A	6/16/2008	6/18/2008	2	1	2
IH03A	6/16/2008	6/18/2008	2	2	2
IH05A	6/16/2008	6/18/2008	2, 5	2	2
IH06A	6/16/2008	6/18/2008	2	2	2
KP01A	6/17/2008	6/18/2008	2	2	2
KP02A	6/17/2008	6/18/2008	2	2	2
KP03A	6/17/2008	6/18/2008	2	2	2
KP05A	6/12/2008	6/13/2008	2	1	1
KP06A	6/11/2008	6/13/2008	2	1	1
LA02A	7/23/2008	7/26/2008	4	3	4
MA01A	6/17/2008	6/18/2008	2	2	2
MA02A	6/13/2008	6/13/2008	1	1	1
MA05A	6/13/2008	6/13/2008	1	1	1
MA06A	6/11/2008	6/13/2008	1	1	1
MD01A	6/22/2008	6/23/2008	3	2	3
MD02A	6/21/2008	6/23/2008	3	2	3
MD03A	6/22/2008	6/23/2008	3	2	3
OH02A	6/11/2008	6/13/2008	2	1	1
RL01A	6/18/2008	6/18/2008	4	3	4
RL02A	6/18/2008	6/18/2008	4	3	4
WW01A	6/19/2008	6/23/2008	3	2	3
Batch Initiation Date	1	7/1/2008	6/27/2008	7/22/2008	
	2	7/15/2008	7/17/2008	7/25/2008	
	3	7/25/2008	8/5/2008 (UV)	7/31/2008	
	4	8/5/2008 (UV)		7/31/2008 (UV)	
	5	8/5/2008			

2.6 10-DAY AMPHIPOD BIOASSAY

The 10-day acute toxicity tests with *E. estuarius* were initiated in four main batches as shown in Table 1. Batch 4 was exposed to UV light; Batch 5 retested two samples for verification of results.

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 three reference sediments, and the native 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 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:	≥6.1 mg/L
pH:	7.8 ± 0.5 units
Temperature:	15 ± 1°C
Salinity:	28 ± 1‰

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 three batches (Table 1). Batch 3 was the UV light exposure batch.

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 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 0.01 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 larval benthic toxicity test with the sand dollar, *Dendraster excentricus*. The sand dollar larval tests were initiated in four batches (Table 1). Batch 4 was exposed to UV light.

The control sediment and reference treatments were tested with each batch of test treatments. To prepare the test exposures, 18 g (± 1 g) of test sediment was placed in clean, acid and solvent-rinsed 1-L glass jars, which were filled to 900 mL with 0.45- μm of filtered seawater at 28 ppt. The seawater was treated with UV light prior to use in the bioassay. Six replicate chambers were prepared for each test treatment, reference sediment, and the native sediment control treatment. 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 15°C.

To collect gametes for each test, spawning was induced by injecting 0.5 mL of 0.5M KCl into the coelomic cavity of the sand dollar. Spawning males and females were placed aboral surface down into a beaker with clean seawater. Gametes from at least two males and two females were used to initiate the test. Once sufficient eggs and sperm had been collected, the eggs were rinsed to remove any detritus or feces and a homogenized sperm solution was added to the egg solutions. Egg-sperm solutions were periodically homogenized with a perforated plunger during the fertilization process. Approximately 60 minutes 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 sub sample of stock solution. This was used to determine the volume of embryo stock solution to deliver approximately 27,000 embryos to each test chamber. The tests were 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.

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 3. 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. Target test parameters were as follows:

Dissolved Oxygen:	≥6.1 mg/L
pH:	7.8 ± 0.5 units
Temperature:	15 ± 1°C
Salinity:	28 ± 1‰

The larval developmental tests were terminated approximately 72 hours after initiation, for all batches, to ensure that approximately 90% of the control larvae had achieved the pluteus stage. To terminate the PSEP test, the overlying seawater was decanted into a clean 1-L jar and mixed with a perforated plunger. From this container, a 10 mL sub-sample was transferred to a 7-dram shell vial and preserved in 5% buffered formalin. The number of normal and abnormal larvae was enumerated on an inverted microscope. Normal larvae included all pluteus stage larvae. Abnormal larvae included abnormally shaped pluteus larvae and all early stage larvae. A water-only reference-toxicant test with copper sulfate was conducted concurrently with each sediment tests.

2.9 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 A, laboratory data sheets are included as Appendix B and statistical results are provided in Appendix C.

3.1 10-DAY AMPHIPOD BIOASSAY

A summary of *E. estuarius* test conditions is presented in Table 2. Mean percent mortality in the control samples ranged from 0 to 6% in the five batches, within the $\leq 10\%$ mortality acceptance criterion. This indicates that the test conditions were suitable for adequate amphipod survival. The LC_{50} values for the cadmium reference-toxicant tests performed on each batch of test organisms ranged from 8.4 to 9.1 mg Cd/L, all were within the control chart limits (3-13 mg Cd/L), indicating that the test organisms used in this study were of similar sensitivity of those previously tested at NewFields.

All water quality parameters were within acceptable limits throughout all of the tests except for minor deviations in salinity 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) that trigger ammonia reference toxicant testing. With one exception, initial and final sulfide concentrations were below 5 mg/L in both overlying and interstitial waters. Sample ED04A in the retest batch had very high interstitial sulfide concentrations rising from 81 mg/L at test initiation to 227.5 mg/L at the end of the test; concurrent interstitial ammonia concentrations were above 25 mg/L. Comments on laboratory bench sheets note that amphipods did not immediately bury in the sediment, many were replaced, and mortality was high in the early days of the test.

Mean mortality in all reference treatments met the SMS performance criteria ($<25\%$ mortality) and indicated that the reference sediment was acceptable for comparison. Mean survival for all samples is shown in Table 3. Three samples in Batch 2 had one replicate in which mortality was 100% whereas all other replicates had 0-5% mortality. For at least one of these there were indications that animals were not added to the test chamber. These replicates were shown to statistically be outliers compared to the other replicates using Grubbs test (Grubbs 1969) and the results from the surrogate sample used for water quality measurements were substituted for the outlier. Sample IH05A had two replicates with 100% mortality, three replicates and the surrogate with low mortality. Because the results were so variable compared to all other samples, the sample was retested. The retest of this sample resulted in no mortality. In addition, sample ED04A which showed 98% mortality in Batch 3 was retested for confirmation of the first result with 100% mortality. Interstitial ammonia and particularly sulfides were high in this sample.

Table 2. Test Condition Summary for *Eohaustorius estuarius*.

Test Conditions: PSEP <i>E. estuarius</i> (SMS)		Batch 1	Batch 2	Batch 3	Batch 4 UV	Batch 5 Retest
Sample Identification		See Table 1	See Table 1	See Table 1	See Table 1	See Table 1
Date sampled		See Table 1	See Table 1	See Table 1	See Table 1	See Table 1
Date received at NewFields Northwest		See Table 1	See Table 1	See Table 1	See Table 1	See Table 1
Sample storage conditions	4°C, dark, nitrogen headspace					
Weeks of holding	≤8 weeks (56 days)	Test 18-24 days; Ref 21 days	Test 23-34 days; Ref 35 days	Test 33-37 days; Ref 45 days	Test 44-50 days; Ref 56 days	Test 46-50 days; Ref 56 days
Source of control sediment	Native sediment, Yaquina Bay OR					
Test Species	<i>E. estuarius</i>					
Supplier	Northwest Aquatic Sciences					
Date acquired		6/25/2008	7/11/2008	7/24/2008	7/30/2008	7/30/2008
Acclimation/holding time		6 days	4 days	1 day	6 days	6 days
Age class		3-5 mm	3-5 mm	3-5 mm	3-5 mm	3-5 mm
Test Procedures	PSEP 1995 with SMARM revisions					
Regulatory Program	SMS					
Test location	NewFields Northwest Laboratory	NFNW Lab	NFNW Lab	NFNW Lab	NFNW Lab	NFNW Lab
Test type/duration	10-Day static	10-Day static	10-Day static	10-Day static	10-Day static	10-Day static
Test dates		7/1/2008- 7/10/2008	7/15/2008- 7/24/2008	7/25/2008- 8/4/2008	8/5/2008- 8/14/2008	8/5/2008- 8/14/2008
Control water	North Hood Canal, sand filtered					
Test temperature	Recommended: 15 ± 1 °C	14.9-16.7	14.6-16.2	14.6-16.4	14.7-16.0	15.1-16.2
Test Salinity	Recommended: 28 ± 1 ppt	27-31	27-31	28-29	27-29	28-29
Test dissolved oxygen	Recommended: > 5.0 mg/L	≥7.5	≥6.9	≥6.1	≥7.8	≥5.1
Test pH	Recommended: 7.8 ± 0.5	7.1-8.7	7.7-8.7	7.7-8.4	7.5-8.6	7.5-8.4
SMS control performance standard	Recommended: Control ≤ 10% mortality	2%	6%	6%	0%	2%
SMS reference performance standard	Recommended: Reference mortality < 25%	RF01A 6%, RF02A 6%, RF03A 11%	RF01A 5%, RF02A 3%, RF03A 11%	RF01A 6%, RF02A 10%, RF03A 23%	RF01A 5%, RF02A 4%, RF03A 12%	RF01A 3%, RF02A 3%, RF03A 5%
SMS pass/fail SQS	Treatment – Reference > 25% mortality and statistically significant = FAIL	All Pass	IH05A – retested (see text)	ED04A Fails - retested	All Pass	ED04A Fails
SMS pass/fail CSL	Treatment – Reference > 30% mortality and statistically significant = FAIL	All Pass	All Pass	ED04A Fails - retested	All Pass	ED04A Fails

Test Conditions: PSEP <i>E. estuarius</i> (SMS)		Batch 1	Batch 2	Batch 3	Batch 4 UV	Batch 5 Retest
Reference Toxicant LC50		8.8 mg/L	8.4 mg/L	8.8 mg/L	9.1 mg/L	9.1 mg/L
Acceptable Range		3.0-13.1 mg/L	3.1-12.2 mg/L	3.3-10.8 mg/L	3.4-11.3 mg/L	3.4-11.3 mg/L
Test Lighting	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Test chamber	1-Liter Glass Chamber	1-Liter Glass	1-Liter Glass	1-Liter Glass	1-Liter Glass	1-Liter Glass
Replicates/treatment	5 + 2 surrogates	5 + 2 surrogates	5 + 2 surrogates	5 + 2 surrogates	5 + 2 surrogates	5 + 2 surrogates
Organisms/replicate	20	20	20	20	20	20
Exposure volume	175 mL sediment/ 775 mL water	175sed/775water	175sed/775water	175sed/775water	175sed/775water	175sed/775water
Feeding	None	None	None	None	None	None
Water renewal	None	None	None	None	None	None
Deviations from Test Protocol		Minor deviation in temperature, pH	Minor deviation in temperature, pH	Minor deviation in pH	Minor deviation in pH	Minor deviation in pH

Table 3. Summary of Test Results for *Eohaustorius estuarius*.

Test Sample Summary										
Test Batch	Sample	Mean Mortality (%)	St Dev		Test Batch	Sample	Mean Mortality (%)	St Dev		
1	BA01A	14	8.2		1	IE03A	20	14.6		
2	BL01A	12	8.4		1	IE04A	9	4.2		
2	BL02A	9	4.2		1	IE06A	7	5.7		
2	BL03A	10	9.4		4UV	IE07A	3	6.7		
2	BL04A	6	6.5		2	IE09A	5	5.0		
2	BL06A	15	10.0		1	IE14A	17	7.6		
4UV	CO01A	5	5.0		1	IE15A	17	7.6		
2	CO02A	3	4.5		2	IH01A	0	0.0		
4UV	CO04A	7	5.7		2	IH02A	14	10.8		
2	DO03A	11	9.1		2	IH03A ¹	22	43.7		
2	DO04A	10	12.2		2	IH05A ²	50	48.0		
3	DO05A	6	8.2		5Retest	IH05A	0	0.0		
4UV	EC01A A	5	3.5		2	IH06A ¹	6	6.5		
4UV	EC01A U	7	6.7		2	KP01A	11	8.9		
4UV	EC02A	9	8.2		2	KP02A	7	2.7		
3	EC04A	1	2.2		2	KP03A	7	8.4		
3	ED03A	11	5.5		2	KP05A	6	4.2		
3	ED04A ²	98	4.5		2	KP06A	6	6.5		
5Retest	ED04A	100	0.0		4UV	LA02A	5	6.1		
3	ED05A	2	2.7		2	MA01A ¹	7	5.7		
1	EH02A	5	6.1		1	MA02A	7	6.7		
4UV	EI02A	4	4.2		1	MA05A	7	5.7		
3	EI07A	15	12.7		1	MA06A	22	11.5		
1	FP01A	6	4.2		3	MD01A	9	10.2		
2	FT01A	12	8.4		3	MD02A	14	6.5		
2	FT04A	9	11.9		3	MD03A	10	10.6		
2	FT06A	8	6.7		2	OH02A	14	4.2		
2	FT11A	11	11.4		4UV	RL01A	4	4.2		
					4UV	RL02A	2	4.5		
					3	VW01A	7	4.5		
Control and Reference Summary										
Sample	Batch 1		Batch 2		Batch 3		Batch 4UV		Batch 5 Retest	
	Mean Mortality (%)	St Dev	Mean Mortality (%)	St Dev	Mean Mortality (%)	St Dev	Mean Mortality (%)	St Dev	Mean Mortality (%)	St Dev
Control	2	2.7	6	4.2	6	6.5	0	0.0	2	2.7
REF01A	6	6.5	5	3.5	6	5.5	5	6.1	3	4.5
REF02A	6	8.9	2	2.7	10	3.5	4	4.2	3	2.7
REF03A	11	8.9	11	10.2	23	7.6	12	11.5	5	6.1

¹ Surrogate results used for outlier replicate.

² Retested for confirmation (ED04A) or clarification (IH05A) of results.

3.2 20-DAY JUVENILE POLYCHAETE BIOASSAY

A summary of *N. arenaceodentata* test conditions is shown in Table 4. No mortality was observed in the *N. arenaceodentata* control sediment and mean individual growth (MIG) in the control sediment was 0.72, 0.50, and 0.82 mg/ind/day, in the three 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 3 were well within control chart limits. This indicates that the test organisms used in this study were of similar sensitivity to those previously tested at NewFields. The LC₅₀ for Batch 2 was 2.7 mg Cd/L, just under the lower limit of 2.9 mg Cd/L, indicating a more sensitive batch of organisms. As indicated in Table 4, the size of the animals in this batch was smaller at test initiation than in the other two batches and therefore may potentially have been more sensitive. Survival in the control and all reference samples in Batch 2 was 100% and mean survival ranged from 88 to 100% in the test samples indicating that the organisms were not overly sensitive.

Dissolved oxygen was measured below the target concentration on the initial day in one chamber; survival for this sample was unaffected. Temperature dropped slightly below recommended limits (<0.5 °C) for one day in Batches 1 and 2. Temperature was adjusted and all temperatures were back within the recommended range the following day.

All except one (ED04A) of the test treatments had ammonia levels below the NOEC (10 mg/L total ammonia) in the initial and final interstitial water. The initial measurement for ED04A for interstitial ammonia was 19.8 mg/L, very close to the minor effects threshold (>20 mg/L total ammonia; Kendall and Barton 2004) but the final measurement was 3.75 mg/L. Initial sulfide concentrations in interstitial water were below the NOEC (3.47 mg/L; Kendall and Barton 2004) for most samples; all final concentrations were below this level. Initial sulfides in sample BL01A were above the threshold for minor effects (5.5 mg/L) at 9.5 mg/L and three samples (MA02A, ED04A, MD02A) had initial sulfide concentrations above the major effects level of 15 mg/L. Sulfide concentrations appear to have dropped rapidly due to the high rate of survival in these samples and concentrations below 1 mg/L at test termination.

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. RF03A showed only 78% 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 5. Survival in the test treatments ranged from 88 to 100%; MIG in the test treatments ranged from 0.30 to 0.96 mg/ind/day.

Table 4. Test Condition Summary for *Neanthes arenaceodentata*.

Test Conditions: PSEP <i>N. arenaceodentata</i> (SMS)		Batch 1	Batch 2	Batch 3 UV
Sample Identification		See Table 1	See Table 1	See Table 1
Date sampled		See Table 1	See Table 1	See Table 1
Date received at NewFields Northwest		See Table 1	See Table 1	See Table 1
Sample storage conditions	4°C, dark, nitrogen headspace			
Weeks of holding	≤8 weeks (56 days)	Test 10-20 days; Ref 17 days	Test 25-31 days; Ref 27 days	Test 44-50 days; Ref 56 days
Source of control sediment	Native sediment, Yaquina Bay OR			
Test Species	<i>N. arenaceodentata</i>			
Supplier	Don Reish/ CalState Long Beach			
Date acquired		6/26/2008	7/15/2008	8/2/2008
Acclimation/holding time		1 day	2 days	3 days
Age class	Juvenile	Juvenile	Juvenile	Juvenile
Test Procedures	PSEP 1995 with SMARM revisions			
Regulatory Program	SMS			
Test location	NewFields Northwest Laboratory	NFNW Lab	NFNW Lab	NFNW Lab
Test type/duration	20-Day static renewal	20-Day static renewal	20-Day static renewal	20-Day static renewal
Test dates		6/27/2008 - 7/17/2008	7/17/2008 - 8/5/2008	8/5/2008 - 8/25/2008
Control water	North Hood Canal, sand filtered			
Test temperature	Recommended: 20 ± 1 °C	18.6-20.4	18.7-20.6	19.2-21.0
Test Salinity	Recommended: 28 ± 2 ppt	27-31	27-30	26-29
Test dissolved oxygen	Recommended: > 6.0 mg/L	≥6.3	≥6.6 except ED04A (5.7 on Day 1 only)	6.7
Test pH	Recommended: 8.0 ± 1.0	7.2-8.7	7.5-8.9	7.6-8.6
Initial biomass	Recommended: 0.5 - 1.0 mg Minimum: 0.25 mg	0.672 mg	0.511 mg	0.555 mg
SMS control performance standard	Recommended: Control ≤ 10% mortality	0%	0%	0%
(Mean Individual Growth - MIG)	Recommended: > 0.72 mg/ind/day Minimum: > 0.38 mg/ind/day	0.72 mg/ind/day	0.50 mg/ind/day	0.82 mg/ind/day
SMS reference performance standard	Recommended: MIGReference/MIGControl > 80%	RF01A 94%, RF02A 99% RF03A 78%	RF01A 129%, RF02A 86% RF03A 97%	RF01A 91%, RF02A 95% RF03A 84%

Test Conditions: PSEP <i>N. arenaceodentata</i> (SMS)		Batch 1	Batch 2	Batch 3 UV
SMS pass/fail SQS	SQS Acceptability: $MIG_{Treatment}/MIG_{Reference} \geq 70\%$	BL06A < 70% RF02A FT06A < 70% RF02A BL03A < 70% RF01A, RF02A MA02A < 70% RF01A, RF02A	ED04A < 70% RF01A KP03A < 70% RF01A EI07A < 70% RF01A, RF03A	All Pass
SMS pass/fail CSL	CSL Acceptability: $MIG_{Treatment}/MIG_{Reference} \geq 50\%$	All Pass	EI07A < 50% RF01A	All Pass
Reference Toxicant LC50		10.3 mg/L	2.7 mg/L	5.3 mg/L
Acceptable Range		2.8-17.4 mg/L	2.9-17.7 mg/L	2.5-18.3 mg/L
Test Lighting	Continuous	Continuous	Continuous	Continuous
Test chamber	1-Liter Glass Chamber	1-Liter Glass Chamber	1-Liter Glass Chamber	1-Liter Glass Chamber
Replicates/treatment	5 + 2 surrogates for WQ	5 + 2 surrogates for WQ	5 + 2 surrogates for WQ	5 + 2 surrogates for WQ
Organisms/replicate	5	5	5	5
Exposure volume	175 mL sediment/ 950 mL water	175 mL sed/ 775 mL water	175 mL sed/ 775 mL water	175 mL sed/ 775 mL water
Feeding	40 mg/jar every other day (8mg/ind every other day)	As recommended	As recommended	As recommended
Water renewal	Water is renewed every third day (1/3 volume of exposure chamber)	As recommended	As recommended	As recommended
Deviations from Test Protocol		Minor deviation in temperature	Minor deviation in temperature and DO for one sample Day 1 Ref Tox under limit	Minor deviation in temperature

Table 5. Summary of Test Results for *Neanthes arenaceodentata*.

Test Sample Summary									
Test Batch	Sample	Mean Mortality (%)	MIG (mg/ind/day)	MIG Std Dev	Test Batch	Sample	Mean Mortality (%)	MIG (mg/ind/day)	MIG Std Dev
1	BA01A	0	0.75	0.19	1	IE03A	12	0.72	0.21
2	BL01A	0	0.69	0.26	1	IE04A	8	0.67	0.11
1	BL02A	0	0.66	0.15	1	IE06A	8	0.66	0.10
1	BL03A	4	0.44	0.07	3	IE07A	0	0.77	0.13
1	BL04A	4	0.58	0.12	1	IE09A	4	0.77	0.08
1	BL06A	0	0.49	0.07	1	IE14A	0	0.59	0.15
3	CO01A	0	0.73	0.08	1	IE15A	0	0.68	0.19
2	CO02A	0	0.52	0.17	1	IH01A	4	0.69	0.15
3	CO04A	0	0.74	0.06	1	IH02A	4	0.68	0.21
2	DO03A	4	0.52	0.25	2	IH03A	0	0.57	0.09
2	DO04A	4	0.48	0.20	2	IH05A	0	0.58	0.13
2	DO05A	0	0.41	0.15	2	IH06A	0	0.52	0.25
3	EC01A Acc	4	0.70	0.11	2	KP01A	0	0.47	0.12
3	EC01A Unacc	4	0.66	0.09	2	KP02A	0	0.59	0.13
3	EC02A	0	0.80	0.16	2	KP03A	0	0.44	0.13
2	EC04A	0	0.49	0.04	1	KP05A	0	0.64	0.10
2	ED03A	4	0.51	0.21	1	KP06A	0	0.60	0.06
2	ED04A	4	0.43	0.10	3	LA02A	8	0.79	0.04
2	ED05A	0	0.61	0.12	2	MA01A	0	0.69	0.14
1	EH02A	8	0.71	0.22	1	MA02A	4	0.38	0.11
3	EI02A	0	0.89	0.11	1	MA05A	0	0.63	0.07
2	EI07A	0	0.30	0.19	1	MA06A	4	0.78	0.13
1	FP01A	8	0.63	0.07	2	MD01A	8	0.45	0.18
1	FT01A	0	0.64	0.09	2	MD02A	0	0.60	0.15
1	FT04A	0	0.75	0.14	2	MD03A	0	0.52	0.20
1	FT06A	0	0.49	0.11	1	OH02A	4	0.61	0.16
1	FT11A	4	0.54	0.11	3	RL01A	0	0.96	0.09
					3	RL02A	0	0.90	0.07
					2	WW01A	4	0.49	0.14
Control and Reference Summary									
Sample	Batch 1			Batch 2			Batch 3		
	Mean Mortality (%)	Growth (mg/ind/day)	MIG Std Dev	Mean Mortality (%)	Growth (mg/ind/day)	MIG Std Dev	Mean Mortality (%)	Growth (mg/ind/day)	MIG Std Dev
Control	0	0.72	0.11	0	0.50	0.17	0	0.82	0.15
RF01A	0	0.68	0.12	0	0.65	0.16	0	0.75	0.10
RF02A	4	0.71	0.20	0	0.43	0.12	0	0.78	0.21
RF03A	16	0.56	0.27	0	0.48	0.05	4	0.68	0.25

3.3 LARVAL DEVELOPMENT BIOASSAY

A summary of the test condition results from the *D. excentricus* test is presented in Table 6. Stocking densities were between 25 and 31 embryos/ml in the four batches. The larval test was validated by mean normal survival in the control treatments of 84-94% in the four batches, within the acceptability criteria of $\geq 70\%$. Water quality parameters remained within the recommended limits throughout the ~72-hour test with the exception of some temporary fluctuations in dissolved oxygen and minor deviations in temperature at test initiation for several of the batches.

Ammonia and sulfide values detected in the test chambers were below the NOEC values for *D. excentricus*. The EC_{50} for the copper reference-toxicant test for proportion normal ranged between 7.0 and 10.8 $\mu\text{g Cu/L}$ for the three batches of test organism, within the control chart limits (5.4-18.6 $\mu\text{g Cu/L}$). 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 67% to 100%; RF03A had the lowest normal survival of the reference stations in all four batches. Test sample normal survival was variable and ranged from 21% to 100% as shown in Table 7.

Table 6. Test Condition Summary for *Dendraster excentricus*.

Test Conditions: PSEP <i>D. excentricus</i>		Batch 1	Batch 2	Batch 3	Batch 4 UV
Sample Identification		See Table 1	See Table 1	See Table 1	See Table 1
Date sampled		See Table 1	See Table 1	See Table 1	See Table 1
Date received at NewFields Northwest		See Table 1	See Table 1	See Table 1	See Table 1
Sample storage conditions	4°C, dark, nitrogen headspace				
Weeks of holding	≤8 weeks (56 days)	Test 39-45 days; Ref 42 days	Test 36-42 days; Ref 42 days	Test 39-42 days; Ref 42 days	Test 39-45 days; Ref 42 days
Test Species	<i>D. excentricus</i>				
Supplier		Field collected Hood Canal	Field collected Hood Canal	Field collected Hood Canal	Field collected Hood Canal
Date acquired		7/21/2008	7/24/2008	7/29/2008	7/29/2008
Acclimation/holding time		1 day	1 day	2 days	2 days
Age class	<2-h old embryos	<2-h old embryos	<2-h old embryos	<2-h old embryos	<2-h old embryos
Test Procedures	PSEP 1995 with SMARM revisions				
Regulatory Program	SMS				
Test location	NewFields Northwest Laboratory	NFNW Lab	NFNW Lab	NFNW Lab	NFNW Lab
Test type/duration	48-96 Hour static test	71 hr	68 hr	72 hr	73 hr
Test dates		7/22/2008-7/25/2008	7/25/2008-7/28/2008	7/31/2008-8/3/2008	7/31/2008-8/3/2008
Control water	0.45 µm-filtered, UV treated, North Hood Canal seawater, adjusted with DI water				
Test temperature	Recommended: 15 ± 1 °C	14.8-16.2	14.5-16.3	14.3-15.6	14.9-16.4
Test Salinity	Recommended: 28 ± 2 ppt	28-29	28-28	28-28	28-28
Test dissolved oxygen	Recommended: > 4.8 mg/L	13 samples all >4.8 mg/L 7 samples 3.8-4.8 on last day	14 samples all >4.8 6 samples 4.4-4.8 one day each	≥4.8 mg/L	≥5.2 mg/L
Test pH	Recommended: 7.8 ± 0.5	7.3-8.3	7.6-8.2	7.4-7.9	7.4-8.0

Biological Testing Result for Port Angeles Harbor Sediment Characterization

Test Conditions: PSEP <i>D. excentricus</i>		Batch 1	Batch 2	Batch 3	Batch 4 UV
Stocking Density (embryos/mL)	Recommended: 20 – 40	31	30	28	25
SMS control performance standard	Recommended: Normal survival \geq 70%	84.0	93.0	91.0	94.0
SMS reference performance standard	Recommended: Reference/Control \geq 65%	RF01A 91%, RF02A 89%, RF03A 73%	RF01A 90%, RF02A 88%, RF03A 80%	RF01A 84%, RF02A 87%, RF03A 67%	RF01A 100%, RF02A 96%, RF03A 88%
SMS pass/fail SQS (NSCA=Normal Survival Control Adjusted)	SQS Acceptability: $NSCA_{Treatment}/NSCA_{Reference} > 0.85$	1 Pass, 16 Fail SQS; see Table 10	7 Pass, 11 Fail SQS; see Table 10	8 Pass, 4 Fail SQS; see Table 10	8 Pass, 2 Fail SQS; see Table 10
SMS pass/fail CSL	CSL Acceptability: $NSCA_{Treatment}/NSCA_{Reference} > 0.70$	4 Pass, 13 Fail CSL; see Table 10	12 Pass, 6 Fail CSL; see Table 10	9 Pass, 3 Fail CSL; see Table 10	8 Pass, 2 Fail CSL; see Table 10
Reference Toxicant EC50		9.5 μ g Cu/L	7.0 μ g Cu/L	10.8 μ g Cu/L	10.8 μ g Cu/L
Acceptable Range		5.4 – 18.6 μ g Cu/L	5.6 – 17.7 μ g Cu/L	5.4 – 17.3 μ g Cu/L	5.4 – 17.3 μ g Cu/L
Test Lighting	14 light:10 Dark	14 light:10 Dark	14 light:10 Dark	14 light:10 Dark	14 light:10 Dark
Test chamber	1-Liter Glass Chamber	1-L Glass	1-L Glass	1-L Glass	1-L Glass
Replicates/treatment	5 + 1 WQ surrogate	5 + 1 surrogate	5 + 1 surrogate	5 + 1 surrogate	5 + 1 surrogate
Exposure volume	18 g sediment/ 900 mL water	18 g sed/900 mL water	18 g sed/900 mL water	18 g sed/900 mL water	18 g sed/900 mL water
Feeding	None	None	None	None	None
Water renewal	None	None	None	None	None
Deviations from Test Protocol		Minor temperature deviations on Day 0; low DO for some samples at termination	Minor temperature deviations on Day 1; temporary DO fluctuations	None	Minor temperature deviations on Day 0

Table 7. Summary of Test Results for *Dendraster excentricus*.

Test Sample Summary								
Test Batch	Sample	Normal Survival (%) ¹	Std Dev		Test Batch	Sample	Normal Survival (%) ¹	Std Dev
1	BA01A	36.6	14.3		1	IE03A	57.0	3.8
2	BL01A	44.5	23.9		1	IE04A	53.4	10.2
2	BL02A	76.0	17.0		1	IE06A	47.2	17.2
2	BL03A	56.4	24.5		4 UV	IE07A	69.0	9.5
2	BL04A	68.0	5.5		2	IE09A	55.9	5.5
1	BL06A	39.0	15.5		1	IE14A	42.4	21.1
4 UV	CO01A	87.6	7.7		1	IE15A	45.0	15.0
3	CO02A	66.6	29.5		2	IH01A	80.7	5.5
4 UV	CO04A	98.1	4.2		2	IH02A	57.2	4.5
3	DO03A	80.5	16.0		2	IH03A	58.3	8.0
3	DO04A	90.5	7.5		2	IH05A	76.9	6.7
3	DO05A	94.8	6.2		2	IH06A	64.1	4.4
4 UV	EC01A Acc	89.1	7.0		2	KP01A	61.4	24.7
4 UV	EC01A Unacc	89.9	7.6		2	KP02A	63.2	11.1
4 UV	EC02A	87.6	5.4		2	KP03A	86.0	7.0
3	EC04A	84.1	7.5		1	KP05A	52.2	6.6
3	ED03A	61.7	33.8		1	KP06A	58.4	25.7
3	ED04A	21.4	10.7		4 UV	LA02A	29.5	13.6
3	ED05A	77.0	10.8		2	MA01A	73.5	14.2
1	EH02A	74.4	8.9		1	MA02A	46.5	18.0
4 UV	EI02A	100.0	0.0		1	MA05A	55.5	13.6
2	EI07A	79.4	8.2		1	MA06A	37.3	13.9
1	FP01A	73.6	6.8		3	MD01A	75.9	9.4
2	FT01A	68.5	16.9		3	MD02A	36.3	34.3
2	FT04A	88.1	3.1		3	MD03A	48.0	21.5
1	FT06A	66.8	10.1		1	OH02A	79.2	7.2
1	FT11A	62.0	11.3		4 UV	RL01A	99.8	0.2
					4 UV	RL02A	99.8	0.4
					3	WW01A	84.3	8.6
Control and Reference Sample Summary								
	Batch 1		Batch 2		Batch 3		Batch 4 UV	
Treatment	Normal Survival (%) ¹	Std Dev	Normal Survival (%) ¹	Std Dev	Normal Survival (%) ¹	Std Dev	Normal Survival (%) ¹	Std Dev
Control	84.3	2.3	92.9	4.9	91.3	7.1	93.5	6.0
RF01A	90.9	6.4	90.0	6.6	83.5	9.3	99.5	1.1
RF02A	88.9	8.4	88.0	6.4	87.4	9.0	95.9	4.9
RF03A	72.8	7.5	80.3	4.9	66.5	16.6	87.8	10.5

¹ Test and Reference survival percentages are normalized to Control survival.

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 Regulatory Limit (RL) or 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 more than 25% greater than the reference sediment mean mortality. Treatments fail the CSL if mean mortality in the test treatment $>30\%$, relative to the reference sediment.

Only sample ED04A failed to meet either the SQS or the CSL criteria compared to all three reference samples (Table 8).

Table 8. Suitability Comparisons for *Eohaustorius estuarius*.

Test Batch	Sample Name	Mean Mortality (%)				Mortality Compared to Reference (%)			Statistically Significant ($p \leq 0.05$)		
		Sample	REF01A	REF02A	REF03A	REF01A	REF02A	REF03A	REF01A	REF02A	REF03A
1	BA01A	14	6	6	11	8	8	3			
2	BL01A	12	5	2	11	7	10	1		Y	
2	BL02A	9	5	2	11	4	7	-2		Y	
2	BL03A	10	5	2	11	5	8	-1			
2	BL04A	6	5	2	11	1	4	-5			
2	BL06A	15	5	2	11	10	13	4	Y	Y	
4	CO01A	5	5	4	12	0	1	-7			
2	CO02A	3	5	2	11	-2	1	-8			
4	CO04A	7	5	4	12	2	3	-5			
2	DO03A	11	5	2	11	6	9	-1		Y	
2	DO04A	10	5	2	11	5	8	-1			
3	DO05A	6	6	10	23	0	-4	-17			
4	EC01A Acc	5	5	4	12	0	1	-7			
4	EC01A Unacc	7	5	4	12	2	3	-5			
4	EC02A	9	5	4	12	4	5	-3			
3	EC04A	1	6	10	23	-5	-9	-22			
3	ED03A	11	6	10	23	5	1	-12			
Retest	ED04A	100	3	3	5	97	97	95	Y	Y	Y
3	ED05A	2	6	10	23	-4	-8	-21			
1	EH02A	5	6	6	11	-1	-1	-6			
4	EI02A	4	5	4	12	-1	0	-8			
3	EI07A	15	6	10	23	9	5	-8			
1	FP01A	6	6	6	11	0	0	-5			
2	FT01A	12	5	2	11	7	10	1		Y	
2	FT04A	9	5	2	11	4	7	-2			
2	FT06A	8	5	2	11	3	6	-3			
2	FT11A	11	5	2	11	6	9	0			
1	IE03A	20	6	6	11	14	14	9			
1	IE04A	9	6	6	11	3	3	-2			
1	IE06A	7	6	6	11	1	1	-4			
4	IE07A	3	5	4	12	-2	-1	-9			
2	IE09A	5	5	2	11	0	3	-6			
1	IE14A	17	6	6	11	11	11	6	Y	Y	
1	IE15A	17	6	6	11	11	11	6	Y	Y	
2	IH01A	0	5	2	11	-5	-2	-11			
2	IH02A	14	5	2	11	9	12	3		Y	
2	IH03A	22	5	2	11	17	20	11			
Retest	IH05A	0	3	3	5	-3	-3	-5			

Test Batch	Sample Name	Mean Mortality (%)				Mortality Compared to Reference (%)			Statistically Significant (p ≤ 0.05)		
		Sample	REF01A	REF02A	REF03A	REF01A	REF02A	REF03A	REF01A	REF02A	REF03A
2	IH06A	6	5	2	11	1	4	-5			
2	KP01A	11	5	2	11	6	9	0		Y	
2	KP02A	7	5	2	11	2	5	-4		Y	
2	KP03A	7	5	2	11	2	5	-4			
2	KP05A	6	5	2	11	1	4	-5			
2	KP06A	6	5	2	11	1	4	-5			
4	LA02A	5	5	4	12	0	1	-7			
2	MA01A	7	5	2	11	2	5	-4			
1	MA02A	7	6	6	11	1	1	-4			
1	MA05A	7	6	6	11	1	1	-4			
1	MA06A	22	6	6	11	16	16	11	Y	Y	
3	MD01A	9	6	10	23	3	-1	-14			
3	MD02A	14	6	10	23	8	4	-9	Y		
3	MD03A	10	6	10	23	4	0	-13			
2	OH02A	14	5	2	11	9	12	3	Y	Y	
4	RL01A	4	5	4	12	-1	0	-8			
4	RL02A	2	5	4	12	-3	-2	-10			
3	WW01A	7	6	10	23	1	-3	-16			

Shaded cells indicate samples not meeting SMS Criteria.

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≤0.05) lower in the test treatment, relative to the reference, and MIG in the test treatment is <70% that of the reference. The treatments will fail CSL criteria if MIG is significantly lower than the reference treatment and is <50% that of the treatment.

Seven samples failed to meet SQS criteria relative to at least one of the reference samples as shown by the shaded cells in Table 9. Because reference sample RF03A failed to meet the reference performance standard in Batch 1, comparisons to this sample are not shown. Sample EI07A also failed CSL criteria compared to RF01A.

Table 9. Suitability Comparisons for *Neanthes arenaceodentata*.

Test Batch	Sample Name	Mean Individual Growth Rate (mg/ind/day)				MIG Relative to Reference			Statistically Significant (p≤0.05)		
		Sample	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A
1	BA01A	0.75	0.68	0.71	0.56	1.09	1.05	1.33			
2	BL01A	0.69	0.65	0.43	0.48	1.07	1.61	1.43			
1	BL02A	0.66	0.68	0.71	0.56	0.97	0.93	1.18			
1	BL03A	0.44	0.68	0.71	0.56	0.65	0.62	0.79	Y	Y	
1	BL04A	0.58	0.68	0.71	0.56	0.84	0.81	1.02			
1	BL06A	0.49	0.68	0.71	0.56	0.72	0.69	0.87	Y	Y	
3 UV	CO01A	0.73	0.75	0.78	0.68	0.97	0.93	1.06			
2	CO02A	0.52	0.65	0.43	0.48	0.81	1.22	1.09			
3 UV	CO04A	0.74	0.75	0.78	0.68	1.00	0.96	1.09			
2	DO03A	0.52	0.65	0.43	0.48	0.81	1.22	1.08			
2	DO04A	0.48	0.65	0.43	0.48	0.74	1.12	0.99			
2	DO05A	0.41	0.65	0.43	0.48	0.63	0.95	0.85			
3 UV	EC01A Acc	0.70	0.75	0.78	0.68	0.94	0.91	1.03			
3 UV	EC01A Unacc	0.66	0.75	0.78	0.68	0.88	0.85	0.96			
3 UV	EC02A	0.80	0.75	0.78	0.68	1.07	1.03	1.17			
2	EC04A	0.49	0.65	0.43	0.48	0.76	1.15	1.02	Y		
2	ED03A	0.51	0.65	0.43	0.48	0.79	1.20	1.06			
2	ED04A	0.43	0.65	0.43	0.48	0.67	1.01	0.90	Y		
2	ED05A	0.61	0.65	0.43	0.48	0.94	1.41	1.26			
1	EH02A	0.71	0.68	0.71	0.56	1.04	1.00	1.26			
3 UV	EI02A	0.89	0.75	0.78	0.68	1.20	1.15	1.31			
2	EI07A	0.30	0.65	0.43	0.48	0.47	0.71	0.63	Y		Y
1	FP01A	0.63	0.68	0.71	0.56	0.93	0.89	1.13			

Test Batch	Sample Name	Mean Individual Growth Rate (mg/ind/day)				MIG Relative to Reference			Statistically Significant (p≤0.05)		
		Sample	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A
1	FT01A	0.64	0.68	0.71	0.56	0.95	0.90	1.15			
1	FT04A	0.75	0.68	0.71	0.56	1.09	1.05	1.33			
1	FT06A	0.49	0.68	0.71	0.56	0.71	0.68	0.87	Y	Y	
1	FT11A	0.54	0.68	0.71	0.56	0.80	0.76	0.97	Y		
1	IE03A	0.72	0.68	0.71	0.56	1.06	1.01	1.29			
1	IE04A	0.67	0.68	0.71	0.56	0.98	0.94	1.19			
1	IE06A	0.66	0.68	0.71	0.56	0.97	0.93	1.18			
3 UV	IE07A	0.77	0.75	0.78	0.68	1.03	0.99	1.12			
1	IE09A	0.77	0.68	0.71	0.56	1.13	1.08	1.37			
1	IE14A	0.59	0.68	0.71	0.56	0.87	0.83	1.05			
1	IE15A	0.68	0.68	0.71	0.56	1.00	0.96	1.21			
1	IH01A	0.69	0.68	0.71	0.56	1.02	0.97	1.24			
1	IH02A	0.68	0.68	0.71	0.56	0.99	0.95	1.21			
2	IH03A	0.57	0.65	0.43	0.48	0.89	1.33	1.18			
2	IH05A	0.58	0.65	0.43	0.48	0.89	1.34	1.19			
2	IH06A	0.52	0.65	0.43	0.48	0.81	1.22	1.08			
2	KP01A	0.47	0.65	0.43	0.48	0.73	1.09	0.97	Y		
2	KP02A	0.59	0.65	0.43	0.48	0.91	1.37	1.22			
2	KP03A	0.44	0.65	0.43	0.48	0.68	1.02	0.91	Y		
1	KP05A	0.64	0.68	0.71	0.56	0.93	0.89	1.13			
1	KP06A	0.60	0.68	0.71	0.56	0.88	0.84	1.06			
3 UV	LA02A	0.79	0.75	0.78	0.68	1.05	1.01	1.15			
2	MA01A	0.69	0.65	0.43	0.48	1.07	1.61	1.43			
1	MA02A	0.38	0.68	0.71	0.56	0.56	0.53	0.68	Y	Y	
1	MA05A	0.63	0.68	0.71	0.56	0.92	0.88	1.11			
1	MA06A	0.78	0.68	0.71	0.56	1.15	1.10	1.39			
2	MD01A	0.45	0.65	0.43	0.48	0.70	1.05	0.94			
2	MD02A	0.60	0.65	0.43	0.48	0.93	1.39	1.24			
2	MD03A	0.52	0.65	0.43	0.48	0.81	1.22	1.08			
1	OH02A	0.61	0.68	0.71	0.56	0.90	0.86	1.09			
3 UV	RL01A	0.96	0.75	0.78	0.68	1.29	1.24	1.41			
3 UV	RL02A	0.90	0.75	0.78	0.68	1.21	1.16	1.32			
2	WW01A	0.49	0.65	0.43	0.48	0.76	1.15	1.02			

Shaded cells indicate samples not meeting SMS Criteria compared to at least one Reference sample.

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≤0.10) lower than that of the reference and if the normal larval development in the test treatment is at less than 85% of the normal development in the reference. Treatments fail CSL criteria if the normal development is less than 70% of the response observed in the reference and statistically significant.

As shown in Table 10, 33 of the project samples failed to meet SQS criteria compared to at least one reference sample and 24 failed to meet CSL criteria (<0.7) compared to at least two reference samples.

Table 10. Suitability Comparisons for *Dendraster excentricus*.

Test Batch	Sample Name	Mean Normal Survivorship (%) Control Adjusted				Relative to Reference Survival			Statistically Significant (p ≤ 0.1)		
		Sample	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A
1	BA01A	36.6	90.9	88.9	72.8	0.40	0.41	0.50	Y	Y	Y
2	BL01A	44.5	90.0	88.0	80.3	0.49	0.51	0.55	Y	Y	Y
2	BL02A	76.0	90.0	88.0	80.3	0.84	0.86	0.95		Y	Y
2	BL03A	56.4	90.0	88.0	80.3	0.63	0.64	0.70	Y	Y	Y
2	BL04A	68.0	90.0	88.0	80.3	0.76	0.77	0.85	Y	Y	Y
1	BL06A	39.0	90.9	88.9	72.8	0.43	0.44	0.54	Y	Y	Y
4UV	CO01A	87.6	99.5	95.9	87.8	0.88	0.91	1.00	Y	Y	
3	CO02A	66.6	83.5	87.4	66.5	0.80	0.76	1.00			
4UV	CO04A	98.1	99.5	95.9	87.8	0.99	1.02	1.12			

Biological Testing Result for Port Angeles Harbor Sediment Characterization

Test Batch	Sample Name	Mean Normal Survivorship (%)				Relative to Reference Survival			Statistically Significant ($p \leq 0.1$)		
		Sample	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A	RF01A	RF02A	RF03A
3	DO03A	80.5	83.5	87.4	66.5	0.96	0.92	1.21			
3	DO04A	90.5	83.5	87.4	66.5	1.08	1.04	1.36			
3	DO05A	94.8	83.5	87.4	66.5	1.14	1.09	1.43			
4UV	EC01A Acc	89.1	99.5	95.9	87.8	0.90	0.93	1.02	Y	Y	
4UV	EC01A Unacc	89.9	99.5	95.9	87.8	0.90	0.94	1.02	Y		
4UV	EC02A	87.6	99.5	95.9	87.8	0.88	0.91	1.00	Y	Y	
3	EC04A	84.1	83.5	87.4	66.5	1.01	0.96	1.26			
3	ED03A	61.7	83.5	87.4	66.5	0.74	0.71	0.93		Y	
3	ED04A	21.4	83.5	87.4	66.5	0.26	0.25	0.32	Y	Y	Y
3	ED05A	77.0	83.5	87.4	66.5	0.92	0.88	1.16	Y	Y	
1	EH02A	74.4	90.9	88.9	72.8	0.82	0.84	1.02	Y	Y	
4UV	EI02A	100.0	99.5	95.9	87.8	1.01	1.04	1.14			
2	EI07A	79.4	90.0	88.0	80.3	0.88	0.90	0.99		Y	Y
1	FP01A	73.6	90.9	88.9	72.8	0.81	0.83	1.01	Y	Y	
2	FT01A	68.5	90.0	88.0	80.3	0.76	0.78	0.85	Y	Y	Y
2	FT04A	88.1	90.0	88.0	80.3	0.98	1.00	1.10			
1	FT06A	66.8	90.9	88.9	72.8	0.74	0.75	0.92	Y	Y	
1	FT11A	62.0	90.9	88.9	72.8	0.68	0.70	0.85	Y	Y	Y
1	IE03A	57.0	90.9	88.9	72.8	0.63	0.64	0.78	Y	Y	Y
1	IE04A	53.4	90.9	88.9	72.8	0.59	0.60	0.73	Y	Y	Y
1	IE06A	47.2	90.9	88.9	72.8	0.52	0.53	0.65	Y	Y	Y
4UV	IE07A	69.0	99.5	95.9	87.8	0.69	0.72	0.79	Y	Y	Y
2	IE09A	55.9	90.0	88.0	80.3	0.62	0.64	0.70	Y	Y	Y
1	IE14A	42.4	90.9	88.9	72.8	0.47	0.48	0.58	Y	Y	Y
1	IE15A	45.0	90.9	88.9	72.8	0.50	0.51	0.62	Y	Y	Y
2	IH01A	80.7	90.0	88.0	80.3	0.90	0.92	1.01		Y	Y
2	IH02A	57.2	90.0	88.0	80.3	0.63	0.65	0.71	Y	Y	Y
2	IH03A	58.3	90.0	88.0	80.3	0.65	0.66	0.73	Y	Y	Y
2	IH05A	76.9	90.0	88.0	80.3	0.85	0.87	0.96		Y	Y
2	IH06A	64.1	90.0	88.0	80.3	0.71	0.73	0.80	Y	Y	Y
2	KP01A	61.4	90.0	88.0	80.3	0.68	0.70	0.77	Y	Y	Y
2	KP02A	63.2	90.0	88.0	80.3	0.70	0.72	0.79	Y	Y	Y
2	KP03A	86.0	90.0	88.0	80.3	0.96	0.98	1.07			
1	KP05A	52.2	90.9	88.9	72.8	0.57	0.59	0.72	Y	Y	Y
1	KP06A	58.4	90.9	88.9	72.8	0.64	0.66	0.80	Y	Y	
4UV	LA02A	29.5	99.5	95.9	87.8	0.30	0.31	0.34	Y	Y	Y
2	MA01A	73.5	90.0	88.0	80.3	0.82	0.84	0.92		Y	Y
1	MA02A	46.5	90.9	88.9	72.8	0.51	0.52	0.64	Y	Y	Y
1	MA05A	55.5	90.9	88.9	72.8	0.61	0.62	0.76	Y	Y	Y
1	MA06A	37.3	90.9	88.9	72.8	0.41	0.42	0.51	Y	Y	Y
3	MD01A	75.9	83.5	87.4	66.5	0.91	0.87	1.14	Y	Y	
3	MD02A	36.3	83.5	87.4	66.5	0.43	0.42	0.55	Y	Y	Y
3	MD03A	48.0	83.5	87.4	66.5	0.57	0.55	0.72	Y	Y	Y
1	OH02A	79.2	90.9	88.9	72.8	0.87	0.89	1.09	Y	Y	
4UV	RL01A	99.8	99.5	95.9	87.8	1.00	1.04	1.14			
4UV	RL02A	99.8	99.5	95.9	87.8	1.00	1.04	1.14			
3	WW01A	84.3	83.5	87.4	66.5	1.01	0.97	1.27			

Shaded cells indicate samples not meeting SMS Criteria compared to at least one Reference sample.

4.4 SUMMARY

Only sample ED04A failed to meet SQS criteria for all three toxicity tests (Table 11). Four samples, BL03A, BL06A, FT06A, and MA02A failed to meet SQS criteria for the juvenile polychaete and larval tests. ED04A was the only sample to be below CSL criteria for two tests, amphipod and larval.

Table 11. Summary of Samples Not Meeting SMS Criteria.

Sample	Sediment Quality Standards									Cleanup Screening Levels								
	Amphipod			Polychaete			Larval			Amphipod			Polychaete			Larval		
	RF01	RF02	RF03	RF01	RF02	RF03	RF01	RF02	RF03	RF01	RF02	RF03	RF01	RF02	RF03	RF01	RF02	RF03
BA01A							X	X	X							X	X	X
BL01A							X	X	X							X	X	X
BL03A				X	X	NC	X	X	X							X	X	
BL04A							X	X	X									
BL06A				X	X	NC	X	X	X							X	X	X
ED03A								X										
ED04A	X	X	X	X			X	X	X	X	X	X				X	X	X
EH02A							X	X										
EI07A				X		X							X					
FP01A							X	X										
FT04A							X	X										
FT06A					X	NC	X	X										
FT11A							X	X								X	X	
IE03A							X	X	X							X	X	
IE04A							X	X	X							X	X	
IE06A							X	X	X							X	X	X
IE07A							X	X	X							X		
IE09A							X	X	X							X	X	X
IE14A							X	X	X							X	X	X
IE15A							X	X	X							X	X	X
IH02A							X	X	X							X	X	
IH03A							X	X	X							X	X	
IH06A							X	X	X									
KP01A							X	X	X							X	X	
kP02A							X	X	X									
KP03A				X														
KP05A							X	X	X							X	X	
KP06A							X	X	X							X	X	
LA02A							X	X	X							X	X	X
MA01A							X	X										
MA02A				X	X	NC	X	X	X							X	X	X
MA05A							X	X	X							X	X	
MA06A							X	X	X							X	X	X
MD02A							X	X	X							X	X	X
MD03A							X	X	X							X	X	

X = Does not meet criterion

NC = No comparison

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*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

APPENDIX A

WATER QUALITY SUMMARIES

Batch 1 - Water Quality Summary for the 10-Day Acute Test with *Eohaustorius estuarius*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.6	8.2	9.1	15.6	15.4	16.0	8.0	7.7	8.3	28.6	28.0	30.0
RF01A	8.6	8.1	9.2	15.4	14.9	15.7	8.1	7.7	8.3	28.8	28.0	30.0
RF02A	8.5	8.2	9.1	15.6	15.2	16.2	8.1	7.9	8.4	28.7	28.0	30.0
RF03A	8.5	8.2	9.2	15.3	14.6	15.7	8.0	7.3	8.4	28.8	28.0	30.0
BA01A	8.4	8.1	9.2	15.5	14.9	16.1	8.1	7.8	8.7	29.3	28.0	30.0
EH02A	8.5	7.5	9.2	15.4	14.9	15.7	8.1	7.8	8.3	29.2	28.0	31.0
FP01A	8.5	8.0	9.0	15.5	15.0	16.3	8.1	7.9	8.3	29.0	28.0	30.0
IE03A	8.5	8.2	9.0	15.5	15.2	15.9	8.1	7.9	8.3	29.3	28.0	30.0
IE04A	8.5	8.2	9.1	15.4	15.0	15.7	8.1	7.8	8.4	29.5	28.0	31.0
IE06A	8.5	8.1	8.9	15.5	14.9	15.8	8.0	7.4	8.4	29.7	29.0	31.0
IE14A	8.5	8.2	9.0	15.6	14.9	16.0	8.2	7.9	8.7	29.2	28.0	31.0
IE15A	8.3	7.9	8.8	15.7	15.2	16.7	8.1	7.7	8.3	29.5	29.0	30.0
MA02A	8.1	7.7	8.6	15.6	15.2	16.3	8.2	7.4	8.7	29.3	29.0	30.0
MA05A	8.2	7.8	8.7	15.8	15.3	16.5	8.0	7.1	8.6	27.5	27.0	28.0
MA06A	8.5	8.2	9.2	15.5	14.9	16.2	8.1	7.9	8.5	29.4	29.0	30.0

Batch 1 - Ammonia and Sulfide Concentrations for the 10-Day 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	<0.5	<0.5	<0.5	0.005	0.002	0.023	0.059
RF01A	<0.5	<0.5	<0.5	<0.5	0.004	0.008	0.076	0.096
RF02A	0.779	<0.5	2.630	<0.5	0.015	0.008	0.134	0.140
RF03A	2.760	1.100	6.190	<0.5	0.002	0.028	0.200	0.265
BA01A	<0.5	<0.5	2.420	0.860	0.009	0.019	0.215	0.291
EH02A	1.410	2.160	6.400	3.460	0.022	0.012	0.285	0.730
FP01A	0.680	<0.5	4.110	0.755	0.017	0.004	0.138	0.556
IE03A	<0.5	<0.5	0.737	0.671	0.022	0.027	0.416	0.384
IE04A	0.924	0.696	<0.5	2.170	0.055	0.012	0.269	0.191
IE06A	<0.5	1.260	2.010	1.990	0.033	0.005	0.252	0.167
IE14A	<0.5	<0.5	2.510	0.603	0.016	0.044	0.327	0.242
IE15A	0.867	0.853	4.310	2.960	0.009	0.008	0.395	0.324
MA02A	<0.5	<0.5	<0.5	<0.5	0.013	0.024	0.220	0.393
MA05A	<0.5	<0.5	1.470	0.974	0.026	0.014	0.327	0.272
MA06A	0.513	<0.5	1.760	1.380	0.010	0.053	0.207	0.364

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

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.4	8.1	9.0	15.5	14.7	16.0	8.0	7.7	8.2	28.8	28.0	30.0
RF01A	8.5	8.1	9.0	15.5	15.1	15.9	8.0	7.8	8.2	27.5	27.0	29.0
RF02A	8.4	8.1	8.9	15.5	14.6	16.2	8.0	7.8	8.2	27.9	27.0	30.0
RF03A	8.4	8.0	8.9	15.5	15.3	16.0	8.0	7.8	8.2	29.0	27.0	30.0
OH02A	8.2	7.7	8.5	15.9	15.5	16.2	8.1	7.8	8.3	29.5	29.0	30.0
FT11A	8.4	7.6	9.0	15.5	14.8	16.0	8.0	7.9	8.2	29.2	28.0	30.0
FT06A	8.4	8.1	8.9	15.7	15.0	16.0	8.1	7.9	8.3	28.2	27.0	29.0
KP06A	8.5	8.3	9.0	15.4	15.2	15.9	8.1	7.9	8.2	28.3	28.0	29.0
KP05A	8.4	8.0	8.8	15.6	15.1	16.1	8.0	7.8	8.3	28.5	28.0	30.0
BL06A	8.4	8.1	8.9	15.5	15.3	16.0	8.1	7.9	8.3	28.4	28.0	30.0
BL04A	8.4	8.2	8.9	15.5	15.3	15.9	8.2	8.0	8.7	28.4	28.0	29.0
BL03A	8.1	7.8	8.7	15.6	15.3	16.0	8.2	7.9	8.4	28.5	28.0	29.0
BL02A	8.1	7.8	8.8	15.5	15.2	15.9	8.3	7.9	8.7	28.1	27.0	29.0
FT01A	8.4	8.1	8.8	15.5	14.7	16.0	8.2	7.9	8.4	28.5	28.0	30.0
FT04A	8.3	8.1	8.7	15.7	15.4	16.0	8.0	7.8	8.4	27.9	27.0	29.0
IE09A	8.4	8.1	8.9	15.5	14.7	15.9	8.1	7.9	8.3	28.5	27.0	30.0
IH01A	8.4	8.1	8.9	15.6	14.7	16.1	8.1	7.9	8.2	28.2	27.0	30.0
IH02A	8.4	8.1	8.9	15.4	15.2	15.9	8.1	7.9	8.2	28.2	28.0	29.0
IH03A	8.3	6.9	8.6	15.5	15.0	16.0	8.1	7.9	8.3	28.3	27.0	30.0
IH05A	8.2	7.9	8.7	15.7	15.4	16.0	8.1	8.0	8.5	28.1	27.0	29.0
IH06A	8.4	8.2	8.8	15.5	15.3	15.9	8.2	8.0	8.5	28.2	27.0	29.0
KP01A	8.4	8.1	8.8	15.5	15.1	15.9	8.1	7.9	8.2	28.3	27.0	30.0
KP02A	8.3	7.6	8.8	15.6	15.4	16.0	8.1	7.9	8.2	28.1	27.0	29.0
KP03A	8.4	8.1	8.9	15.5	15.1	16.0	8.0	7.7	8.4	27.9	27.0	29.0
MA01A	8.4	8.1	8.7	15.5	15.3	16.1	8.0	7.9	8.3	27.8	27.0	29.0
BL01A	8.0	7.7	8.4	15.5	14.9	15.9	8.2	8.0	8.8	28.9	28.0	29.0
CO02A	8.3	8.1	8.7	15.5	14.7	15.9	8.2	7.9	8.6	29.7	29.0	31.0
DO03A	8.5	8.3	8.9	15.5	15.2	15.9	8.0	7.9	8.2	28.2	27.0	29.0
DO04A	8.4	7.8	9.0	15.5	15.3	16.2	8.2	7.9	8.6	29.5	29.0	30.0

Batch 2 - Ammonia and Sulfide Concentrations for the 10-Day 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	<0.5	<0.5	<0.5	0.008	0.002	0.039	0.037
RF01A	<0.5	<0.5	<0.5	<0.5	0.007	0.000	0.109	0.136
RF02A	0.624	<0.5	1.660	<0.5	0.016	0.001	0.133	0.206
RF03A	1.700	2.370	3.920	4.330	0.026	0.018	0.204	0.124
OH02A	0.727	2.110	1.500	2.410	0.049	0.002	0.311	0.301
FT11A	0.797	<0.5	1.680	<0.5	0.038	0.004	0.302	0.281
FT06A	1.310	<0.5	4.170	<0.5	0.018	0.002	0.233	0.200
KP06A	0.586	<0.5	1.270	<0.5	0.023	0.002	0.219	0.176
KP05A	1.320	2.290	2.460	1.830	0.014	0.003	0.200	0.106
BL06A	0.763	<0.5	3.310	<0.5	0.043	0.002	0.142	0.242
BL04A	<0.5	<0.5	2.080	0.558	0.014	0.003	0.376	0.212
BL03A	1.080	2.600	3.000	2.820	0.218	0.002	0.192	0.105
BL02A	0.708	0.726	1.630	<0.5	0.015	0.006	0.277	0.272
FT01A	<0.5	0.624	0.789	<0.5	0.007	0.003	0.212	0.190
FT04A	0.596	2.040	3.050	1.920	0.008	0.004	0.139	0.127
IE09A	<0.5	0.649	<0.5	<0.5	0.018	0.004	0.274	0.053
IH01A	<0.5	<0.5	<0.5	<0.5	0.011	0.001	0.534	0.190
IH02A	<0.5	<0.5	<0.5	<0.5	0.020	0.003	0.274	0.282
IH03A	0.562	1.440	1.470	ND	0.011	0.002	0.592	ND
IH05A	0.958	2.540	2.650	ND	0.007	0.003	0.489	ND
IH06A	0.958	1.810	2.540	ND	0.014	0.002	0.173	ND
KP01A	1.000	1.880	2.520	ND	0.009	0.002	0.277	ND
KP02A	<0.5	1.580	1.940	0.971	0.021	0.006	0.298	0.083
KP03A	0.674	1.430	1.910	0.988	0.098	0.002	0.310	0.190
MA01A	0.905	ND	5.680	ND	0.575	ND	1.350	ND
BL01A	<0.5	1.060	0.673	1.100	0.033	0.003	0.627	0.288
CO02A	0.819	1.550	2.600	0.852	0.019	0.007	0.342	0.153
DO03A	0.991	<0.5	2.010	ND	0.028	0.013	0.334	ND
DO04A	0.588	0.896	2.590	<0.5	0.035	0.004	0.378	0.207

Batch 3 - Water Quality Summary for the 10-Day Acute Test with *Eohaustorius estuarius*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.3	7.3	8.6	15.2	14.6	15.9	8.0	7.9	8.1	29.0	29.0	29.0
RF01A	8.2	6.9	8.5	15.4	14.8	16.2	8.0	7.8	8.2	28.3	28.0	29.0
RF02A	8.2	6.9	8.5	15.3	14.6	16.2	8.0	7.9	8.2	28.9	28.0	29.0
RF03A	8.3	7.6	8.5	15.2	14.7	15.8	8.1	7.9	8.2	28.9	28.0	29.0
EI07A	8.1	6.7	8.5	15.5	15.0	16.1	8.1	7.9	8.3	28.9	28.0	29.0
DO05A	8.1	6.8	8.5	15.4	15.0	15.9	8.2	7.9	8.3	29.0	29.0	29.0
EC04A	8.0	6.1	8.4	15.5	14.9	16.4	8.0	7.7	8.2	28.8	28.0	29.0
ED03A	8.0	6.8	8.6	15.4	14.7	16.4	8.1	7.8	8.4	28.7	28.0	29.0
ED04A	8.0	6.7	8.4	15.4	14.8	15.9	8.2	7.8	8.4	29.0	29.0	29.0
ED05A	8.2	6.5	8.5	15.4	14.6	16.1	8.0	7.7	8.2	29.0	29.0	29.0
MD01A	8.1	7.2	8.4	15.2	14.7	15.7	8.0	7.7	8.2	29.0	29.0	29.0
MD02A	7.8	6.5	8.3	15.2	14.7	15.6	8.0	7.8	8.2	29.0	29.0	29.0
MD03A	8.2	7.3	8.6	15.3	14.7	16.3	8.2	7.9	8.5	29.0	29.0	29.0
WW01A	8.2	7.5	8.5	15.3	14.7	16.3	8.1	8.0	8.2	29.0	29.0	29.0

Batch 3 - Ammonia and Sulfide Concentrations for the 10-Day 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	0.71	<0.5	0.65	<0.5	0.007	0.000	0.013	0.020
RF01A	<0.5	<0.5	0.173	<0.5	0.008	0.010	0.000	0.176
RF02A	1.550	<0.5	4.150	<0.5	0.008	0.014	0.000	0.048
RF03A	4.200	1.47	6.930	1.680	0.007	0.015	0.000	0.061
EI07A	2.660	3.15	1.920	3.780	0.012	0.012	0.000	0.149
DO05A	<0.5	0.672	0.798	0.903	0.008	0.013	0.386	0.347
EC04A	1.660	0.995	3.640	1.370	0.007	0.007	0.000	0.293
ED03A	3.130	2.93	5.020	2.650	0.011	0.003	0.000	0.240
ED04A	18.800	16.0	31.500	15.500	0.029	2.33	0.900	7.420
ED05A	1.710	1.24	4.180	1.120	0.013	0.026	0.000	0.259
MD01A	2.460	1.10	3.980	1.160	0.010	0.010	0.000	0.065
MD02A	6.260	7.99	5.800	6.690	0.012	0.020	0.000	0.222
MD03A	2.900	2.09	3.380	1.980	0.008	0.007	0.000	0.180
WW01A	2.210	<0.5	10.500	<0.5	0.011	0.009	3.925	0.164

Batch 4 - Water Quality Summary for the 10-Day Acute Test with *Eohaustorius estuarius*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.4	8.2	8.7	15.4	14.8	15.9	7.9	7.5	8.1	28.0	28.0	28.0
RF01A	8.3	7.9	8.5	15.4	14.8	15.9	8.0	7.9	8.1	28.0	28.0	28.0
RF02A	8.3	8.2	8.5	15.4	14.6	16.0	8.0	7.9	8.1	28.0	28.0	28.0
RF03A	8.3	8.1	8.4	15.3	14.8	15.6	8.1	7.9	8.5	28.0	28.0	28.0
EI02A	8.4	8.3	8.5	15.3	14.8	15.8	8.0	7.9	8.3	28.1	28.0	29.0
IE07A	8.3	8.1	8.5	15.3	14.8	15.6	8.1	7.9	8.6	28.2	28.0	29.0
RL01A	8.4	8.3	8.5	15.3	14.7	15.7	8.1	7.8	8.2	28.1	28.0	29.0
RL02A	8.4	8.2	8.6	15.4	14.7	15.8	8.1	7.9	8.4	28.1	28.0	29.0
CO01A	8.4	8.3	8.4	15.2	14.8	15.7	8.0	7.8	8.1	28.0	28.0	28.0
CO04A	8.6	8.3	9.7	15.6	15.0	16.0	8.1	7.9	8.4	28.0	28.0	28.0
LA02A	8.2	6.1	8.5	15.4	14.7	15.8	8.0	7.8	8.4	28.1	28.0	29.0
EC01A Acclimated	8.4	8.3	8.5	15.5	14.8	15.8	7.9	7.8	8.2	27.0	27.0	27.0
EC01A Unacclimated	8.3	7.8	8.5	15.4	14.8	15.8	7.8	7.6	8.0	26.7	26.0	28.0
EC02A	8.4	8.1	8.8	15.4	14.7	15.9	8.1	7.9	8.4	28.0	28.0	28.0

Batch 4 - Ammonia and Sulfide Concentrations for the 10-Day 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	<0.5	<0.5	<0.5	0.001	0.007	0.013	0.058
RF01A	<0.5	>0.5	<0.5	<0.5	0.014	0.001	0.189	0.105
RF02A	<0.5	>0.5	1.540	<0.5	0.013	0.003	0.112	0.091
RF03A	0.886	>0.5	2.470	<0.5	0.016	0.012	0.058	0.072
EI02A	<0.5	>0.5	1.950	<0.5	0.017	0.008	0.206	0.150
IE07A	0.809	No Data	4.430	No Data	0.032	No Data	0.320	No Data
RL01A	<0.5	>0.5	3.520	<0.5	0.013	0.007	0.176	0.054
RL02A	1.350	>0.5	7.840	0.931	0.017	0.007	0.324	0.079
CO01A	<0.5	>0.5	<0.5	<0.5	0.013	0.006	0.140	0.126
CO04A	<0.5	>0.5	<0.5	<0.5	0.015	0.004	0.088	0.052
LA02A	<0.5	>0.5	1.340	<0.5	0.029	0.013	0.072	0.044
EC01A Acclimated	<0.5	>0.5	1.070	<0.5	0.215	0.011	0.158	0.160
EC01A Unacclimated	<0.5	>0.5	0.669	<0.5	0.003	0.006	0.188	0.060
EC02A	<0.5	>0.5	<0.5	<0.5	0.017	0.005	0.150	0.106

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

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.4	8.2	8.5	15.5	15.2	15.8	8.0	7.9	8.1	28.5	28.0	29.0
RF01A	8.4	8.3	8.6	15.4	15.2	15.9	8.0	7.8	8.1	28.0	28.0	28.0
RF02A	8.2	8.0	8.5	15.6	15.1	16.2	7.8	7.5	8.0	28.1	28.0	29.0
RF03A	8.2	7.9	8.4	15.5	15.2	15.8	8.0	7.7	8.2	28.5	28.0	29.0
ED04A	7.6	5.1	8.3	15.7	15.3	16.2	8.2	7.9	8.4	28.5	28.0	29.0
IH05A	8.0	7.5	8.3	15.5	15.2	15.9	8.0	7.9	8.2	28.5	28.0	29.0

Retest - Ammonia and Sulfide Concentrations for the 10-Day 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	<0.5	<0.5	<0.5	0.001	0.001	0.010	0.019
RF01A	<0.5	<0.5	<0.5	<0.5	0.004	0.001	0.085	0.362
RF02A	1.950	0.972	1.850	1.150	0.001	0.005	0.071	0.362
RF03A	2.400	2.120	1.780	3.400	0.004	0.032	0.030	0.150
ED04A	3.460	18.000	27.500	25.100	0.065	0.006	81.0	227.5
IH05A	<0.5	3.350	3.800	4.890	0.016	0.007	0.197	0.840

Batch 1 - Water Quality Summary Test Results for the 20-day Chronic Toxicity Test with *N. arenaceodentata*

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.9	7.5	8.5	20.0	19.2	20.3	8.2	7.8	8.5	28.1	27.0	30.0
RF01A	7.8	6.6	8.5	20.1	19.3	20.4	8.2	7.8	8.3	28.2	27.0	30.0
RF02A	7.8	7.1	8.5	20.0	18.8	20.3	8.1	7.6	8.4	28.0	27.0	29.0
RF03A	7.6	7.2	8.2	20.1	19.2	20.3	8.2	7.8	8.5	28.1	27.0	29.0
BA01A	7.8	7.5	8.4	20.1	19.2	20.3	8.3	7.9	8.6	28.3	27.0	30.0
EH02A	7.8	6.9	8.3	20.1	19.0	20.3	8.2	7.9	8.4	28.2	27.0	29.0
FP01A	7.8	7.4	8.4	20.0	19.5	20.3	8.2	7.8	8.5	27.9	27.0	29.0
IE03A	7.8	7.5	8.4	19.9	19.0	20.4	8.3	7.8	8.8	28.0	27.0	29.0
IE04A	7.7	7.2	8.4	19.8	18.8	20.3	8.2	7.2	8.9	28.1	27.0	29.0
IE06A	7.6	6.1	8.3	20.1	19.4	20.4	8.3	7.9	8.7	28.3	27.0	30.0
IE14A	7.8	7.1	8.3	20.1	19.2	20.3	8.3	8.0	8.9	28.3	27.0	29.0
MA06A	7.8	6.3	8.4	20.1	19.3	20.8	8.2	8.0	8.5	28.1	27.0	30.0
MA05A	7.8	7.5	8.4	20.1	19.2	20.3	8.3	8.0	8.5	28.2	27.0	30.0
MA02A	7.7	6.8	8.4	20.0	19.2	20.3	8.3	7.7	8.9	28.2	27.0	30.0
IE15A	7.8	7.2	8.5	20.0	19.2	20.4	8.3	7.9	8.5	28.0	27.0	30.0
OH02A	7.9	7.3	8.8	19.9	18.6	20.4	8.1	7.9	8.3	28.0	27.0	29.0
FT11A	7.9	7.4	8.5	19.9	18.4	20.4	8.1	7.9	8.3	28.2	27.0	29.0
FT06A	7.8	7.5	8.4	20.1	19.1	20.4	8.2	7.9	8.4	28.3	27.0	31.0
KP06A	7.7	6.9	8.3	20.1	19.0	20.3	8.3	8.0	8.7	28.2	27.0	29.0
KP05A	7.8	7.5	8.4	20.1	19.4	20.4	8.2	7.9	8.6	28.2	27.0	30.0
BL06A	7.8	7.3	8.4	20.1	19.0	20.3	8.3	7.9	8.5	28.3	27.0	31.0
BL04A	7.9	7.3	8.8	19.9	18.6	20.4	8.1	7.9	8.3	28.0	27.0	29.0
BL03A	7.9	7.4	8.5	19.9	18.4	20.4	8.1	7.9	8.3	28.2	27.0	29.0
BL02A	7.8	7.5	8.4	20.1	19.1	20.4	8.2	7.9	8.4	28.3	27.0	31.0
EI02A	7.7	6.9	8.3	20.1	19.0	20.3	8.3	8.0	8.7	28.2	27.0	29.0
FT01A	7.8	7.5	8.4	20.1	19.4	20.4	8.2	7.9	8.6	28.2	27.0	30.0
FT04A	7.8	7.3	8.4	20.1	19.0	20.3	8.3	7.9	8.5	28.3	27.0	31.0
IE09A	7.7	6.9	8.3	20.1	19.0	20.3	8.3	8.0	8.7	28.2	27.0	29.0
IH01A	7.8	7.5	8.4	20.1	19.4	20.4	8.2	7.9	8.6	28.2	27.0	30.0
IH02A	7.8	7.3	8.4	20.1	19.0	20.3	8.3	7.9	8.5	28.3	27.0	31.0

Batch 1 - Ammonia and Sulfide Test Results for the 20-day Chronic Toxicity Test with *N. 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	0.005	0.031	0.028
RF01A	<0.5	<0.5	<0.5	<0.5	0.008	0.003	0.083	0.027
RF02A	0.52	<0.5	2.75	<0.5	0.014	0.010	0.191	0.015
RF03A	1.32	<0.5	1.94	<0.5	0.009	0.020	0.085	0.018
BA01A	1.06	<0.5	4.84	<0.5	0.021	0.003	0.054	0.018
EH02A	1.22	<0.5	7.30	0.31	0.034	0.002	0.794	No Data
FP01A	0.87	<0.5	3.40	<0.5	0.024	0.000	0.262	No Data
IE03A	<0.5	<0.5	2.10	<0.5	0.050	0.001	0.108	0.104
IE04A	<0.5	<0.5	2.26	<0.5	0.016	0.006	0.106	0.024
IE06A	0.52	<0.5	3.43	0.93	0.063	0.007	3.580	0.047
IE14A	<0.5	<0.5	4.07	<0.5	0.056	0.019	0.060	0.018
MA06A	<0.5	<0.5	2.64	<0.5	0.015	0.003	0.041	0.116
MA05A	<0.5	<0.5	2.22	0.51	0.040	0.002	0.069	0.063
MA02A	<0.5	<0.5	0.68	<0.5	0.067	0.002	15.200	0.132
IE15A	0.64	<0.5	4.40	<0.5	0.050	0.005	0.068	0.062
OH02A	<0.5	<0.5	2.50	<0.5	0.083	0.004	0.202	0.223
FT11A	<0.5	<0.5	2.83	<0.5	0.018	0.005	0.118	0.075
FT06A	0.72	<0.5	3.63	<0.5	0.027	0.001	0.041	0.016
KP06A	<0.5	<0.5	2.00	<0.5	0.021	0.000	0.032	0.057
KP05A	1.22	<0.5	2.84	<0.5	0.021	0.003	0.046	0.106
BL06A	1.32	<0.5	3.44	<0.5	0.018	0.003	0.044	0.394
BL04A	<0.5	<0.5	1.70	0.84	0.038	0.000	0.342	0.580
BL03A	2.13	<0.5	3.88	<0.5	0.009	0.001	0.101	0.077
BL02A	0.89	<0.5	2.18	<0.5	0.012	0.000	0.728	0.474
EI02A	<0.5	<0.5	2.62	<0.5	0.017	0.000	0.288	0.306
FT01A	<0.5	<0.5	1.17	<0.5	0.022	0.003	0.079	0.111
FT04A	<0.5	<0.5	2.51	0.56	0.029	0.003	0.318	0.240
IE09A	<0.5	<0.5	1.14	<0.5	0.031	0.032	1.414	0.077
IH01A	<0.5	<0.5	0.57	<0.5	0.794	0.008	6.000	0.187
IH02A	<0.5	<0.5	0.79	0.76	0.071	0.004	0.070	0.312

Batch 2 - Water Quality Summary Test Results for the 20-day Chronic Toxicity Test with *N. arenaceodentata*

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.8	7.6	8.1	20.1	19.0	20.5	8.1	8.0	8.2	28.0	27.0	29.0
RF01A	7.7	7.3	8.0	19.8	19.0	20.1	7.8	7.5	8.1	28.0	27.0	30.0
RF02A	7.7	7.6	8.0	20.1	19.0	20.3	8.1	7.8	8.2	27.9	27.0	29.0
RF03A	7.7	7.5	7.9	20.1	18.9	20.4	8.2	7.9	8.6	28.3	28.0	30.0
IH03A	7.6	6.7	8.0	20.0	18.9	20.4	8.3	7.8	8.7	28.4	28.0	29.0
IH05A	7.6	7.4	8.2	19.9	18.7	20.3	8.0	7.6	8.4	28.0	27.0	30.0
IH06A	7.6	7.5	7.8	20.0	19.0	20.4	8.1	7.9	8.4	27.9	27.0	29.0
KP01A	7.6	7.5	7.9	20.0	18.9	20.5	8.3	7.8	8.7	28.3	28.0	29.0
KP02A	7.6	7.2	8.0	19.9	19.0	20.3	8.1	7.8	8.5	28.2	27.0	30.0
KP03A	7.7	7.5	8.0	20.1	18.8	20.4	8.2	8.0	8.4	28.1	27.0	29.0
MA01A	7.5	6.6	8.0	20.1	19.0	20.6	8.1	7.8	8.5	28.1	27.0	30.0
BL01A	7.6	7.2	7.8	20.1	19.0	20.4	8.3	8.0	8.7	28.0	27.0	30.0
CO02A	7.6	7.1	8.3	20.0	18.9	20.3	8.4	7.8	8.9	28.0	27.0	29.0
DO03A	7.7	7.6	7.9	20.1	18.9	20.4	8.2	7.8	8.3	27.9	27.0	29.0
DO04A	7.7	7.5	7.9	20.1	19.0	20.4	8.2	8.0	8.5	28.0	27.0	30.0
DO05A	7.6	6.8	7.9	20.0	19.0	20.4	8.3	7.8	8.4	28.0	27.0	29.0
EI07A	7.6	7.5	7.9	20.0	18.9	20.3	8.3	7.8	8.6	28.0	27.0	29.0
EC04A	7.6	7.1	7.8	20.1	18.9	20.4	8.2	7.8	8.4	28.0	27.0	29.0
ED03A	7.7	7.5	7.9	20.0	19.0	20.3	8.2	8.0	8.5	28.1	28.0	29.0
ED04A	7.4	5.7	7.8	20.0	19.0	20.2	8.2	7.8	8.4	28.2	28.0	30.0
ED05A	7.7	7.3	8.0	20.0	18.8	20.4	8.2	8.0	8.4	28.1	27.0	30.0
MD01A	7.6	7.2	7.9	20.1	18.8	20.4	8.2	8.0	8.3	30.1	28.0	36.0
MD02A	7.5	7.3	7.7	20.1	18.9	20.5	8.2	7.9	8.4	28.3	27.0	30.0
MD03A	7.6	7.1	7.9	20.1	18.8	20.4	8.2	7.9	8.5	28.0	27.0	29.0
WW01A	7.7	7.5	7.9	20.0	18.9	20.3	8.2	7.9	8.4	28.0	27.0	28.0

Batch 2 - Ammonia and Sulfide Test Results for the 20-day Chronic Toxicity Test with *N. 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	0.007	0.000	0.063	0.072
RF01A	<0.5	<0.5	0.58	<0.5	0.005	0.000	0.118	0.036
RF02A	1.16	<0.5	3.24	<0.5	0.008	0.002	0.256	0.103
RF03A	2.44	<0.5	4.47	<0.5	0.130	0.006	0.047	0.035
IH03A	1.36	<0.5	3.46	<0.5	0.013	0.000	0.940	0.285
IH05A	2.34	<0.5	4.45	0.62	0.011	0.000	0.694	0.284
IH06A	2.07	<0.5	4.57	<0.5	0.017	0.000	1.100	0.234
KP01A	1.95	<0.5	3.82	<0.5	0.020	0.001	0.098	0.055
KP02A	1.47	<0.5	3.73	<0.5	0.009	0.003	0.383	0.026
KP03A	0.88	<0.5	2.65	<0.5	0.018	0.001	0.475	0.228
MA01A	2.75	<0.5	6.65	<0.5	0.021	0.001	0.964	0.385
BL01A	<0.5	<0.5	1.68	0.61	0.025	0.000	9.500	0.076
CO02A	1.37	<0.5	6.03	1.05	0.007	0.001	0.450	0.296
DO03A	1.52	<0.5	3.53	<0.5	0.020	0.003	0.545	0.194
DO04A	1.03	<0.5	2.48	<0.5	0.013	0.000	0.447	0.149
DO05A	<0.5	<0.5	<0.5	<0.5	0.019	0.000	0.497	0.070
EI07A	<0.5	<0.5	0.96	<0.5	0.008	0.004	0.314	0.223
EC04A	0.71	<0.5	2.84	<0.5	0.011	0.003	0.676	0.187
ED03A	1.85	<0.5	5.05	<0.5	0.009	0.002	0.183	0.092
ED04A	9.47	5.80	19.80	3.75	0.022	0.001	27.950	0.117
ED05A	0.93	<0.5	2.81	<0.5	0.017	0.000	0.852	0.219
MD01A	1.29	<0.5	4.09	<0.5	0.010	0.000	0.165	0.295
MD02A	3.62	<0.5	7.82	1.05	0.011	0.000	16.400	0.098
MD03A	1.52	<0.5	4.09	<0.5	0.007	0.000	0.141	0.146
WW01A	1.18	<0.5	2.86	<0.5	0.007	0.007	0.403	0.311

Batch 3 - Water Quality Summary Test Results for the 20-day Chronic Toxicity Test with *N. arenaceodentata*

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.6	6.7	7.9	20.3	19.6	20.9	8.0	7.7	8.2	28.3	27.0	29.0
RF01A	7.7	7.4	7.9	20.3	19.4	21.0	8.0	7.8	8.2	28.2	26.0	29.0
RF02A	7.7	7.5	8.0	20.3	19.8	20.8	8.1	7.9	8.3	28.3	27.0	29.0
RF03A	7.7	7.5	8.0	20.2	19.8	20.8	8.2	7.9	8.4	28.3	27.0	29.0
EI02A	7.8	7.4	8.7	20.3	19.7	20.9	8.0	7.8	8.2	28.3	27.0	29.0
IE07A	7.7	7.5	7.9	20.3	19.7	20.9	8.4	7.9	8.6	28.4	27.0	29.0
RL01A	7.8	7.6	8.0	20.2	19.5	20.8	8.2	7.8	8.3	28.3	27.0	29.0
RL02A	7.7	7.4	7.9	20.3	19.8	20.9	8.1	7.8	8.2	28.3	27.0	29.0
CO01A	7.7	7.5	7.9	20.2	19.6	21.0	8.0	7.9	8.2	28.3	27.0	29.0
CO04A	7.8	7.1	8.9	20.3	19.6	21.0	8.1	7.7	8.3	28.3	27.0	29.0
LA02A	7.6	7.3	8.0	20.0	19.2	21.0	8.1	7.7	8.4	28.3	27.0	29.0
EC01A Acclimated	7.8	7.5	8.0	20.2	19.8	20.8	8.0	7.6	8.3	28.0	27.0	29.0
EC01A Unacclimated	7.7	7.4	8.0	20.3	19.5	20.9	8.0	7.6	8.2	28.0	27.0	29.0
EC02A	7.7	7.2	8.0	20.3	19.7	21.0	8.1	7.8	8.2	28.3	27.0	29.0

Batch 3 - Ammonia and Sulfide Test Results for the 20-day Chronic Toxicity Test with *N. 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	0.70	0.001	0.000	0.018	0.013
RF01A	<0.5	<0.5	<0.5	<0.5	0.006	0.000	0.103	0.047
RF02A	<0.5	<0.5	0.81	<0.5	0.006	0.010	0.182	0.064
RF03A	0.75	<0.5	3.39	<0.5	0.007	0.008	0.025	0.095
EI02A	<0.5	<0.5	0.88	<0.5	0.011	0.003	0.214	0.160
IE07A	0.66	<0.5	2.08	<0.5	0.031	0.001	0.287	0.116
RL01A	<0.5	<0.5	1.18	<0.5	0.010	0.000	0.157	0.079
RL02A	1.17	<0.5	3.27	0.57	0.011	0.011	0.152	0.139
CO01A	<0.5	<0.5	<0.5	<0.5	0.009	0.000	0.129	0.080
CO04A	<0.5	<0.5	<0.5	<0.5	0.006	0.000	0.045	0.029
LA02A	<0.5	<0.5	1.12	<0.5	0.033	0.020	0.052	0.168
EC01A Acclimated	<0.5	<0.5	<0.5	<0.5	0.000	0.000	0.035	0.200
EC01A Unacclimated	<0.5	<0.5	<0.5	<0.5	0.009	0.000	0.166	0.131
EC02A	<0.5	<0.5	<0.5	<0.5	0.009	0.009	0.086	0.276

Batch 1 - Water Quality Summary for the 48-96h Acute Test with *Dendraster excentricus*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.4	6.9	7.7	15.4	15.3	15.4	7.9	7.7	8.2	28.0	28.0	28.0
RF01A	7.2	6.5	7.8	15.5	15.0	16.1	7.8	7.6	7.9	28.0	28.0	28.0
RF02A	7.0	6.3	7.8	15.5	15.4	15.7	7.8	7.6	7.9	28.3	28.0	29.0
RF03A	5.6	3.8	6.5	15.6	15.4	15.9	7.8	7.7	7.9	28.0	28.0	28.0
BA01A	6.2	5.2	6.6	15.7	15.3	15.9	7.8	7.6	7.9	28.3	28.0	29.0
EH02A	6.6	5.4	7.2	15.7	15.2	16.0	7.8	7.6	7.9	28.0	28.0	28.0
FP01A	6.6	5.5	7.3	15.7	15.3	16.1	7.8	7.6	7.9	28.0	28.0	28.0
IE03A	5.7	3.9	6.6	15.7	15.5	15.9	7.8	7.7	7.9	28.0	28.0	28.0
IE04A	5.4	5.0	6.3	15.7	15.6	15.8	7.8	7.7	7.9	28.0	28.0	28.0
IE06A	5.8	5.3	6.4	15.7	15.4	16.2	7.8	7.7	7.9	28.0	28.0	28.0
IE14A	5.2	4.0	6.1	15.6	15.4	15.7	7.9	7.6	8.3	28.0	28.0	28.0
MA06A	6.1	4.5	7.4	15.5	15.0	15.8	7.8	7.7	7.9	28.0	28.0	28.0
MA05A	5.4	3.7	6.9	15.7	15.2	16.0	7.7	7.5	7.9	28.0	28.0	28.0
MA02A	5.4	4.9	5.8	16.0	15.8	16.1	7.8	7.7	7.9	28.0	28.0	28.0
IE15A	5.7	4.4	6.8	15.3	14.8	15.8	7.9	7.7	8.2	28.0	28.0	28.0
OH02A	5.6	4.7	7.2	15.7	15.4	16.1	7.6	7.3	7.9	28.3	28.0	29.0
FT11A	6.0	5.4	7.0	15.8	15.6	16.1	7.7	7.6	7.9	28.3	28.0	29.0
FT06A	5.8	5.2	6.7	15.7	15.5	16.1	7.8	7.6	7.9	28.0	28.0	28.0
KP06A	5.5	5.0	6.4	15.5	14.8	15.8	7.8	7.6	8.0	28.0	28.0	28.0
KP05A	5.9	4.9	6.8	15.7	15.4	16.2	7.7	7.6	7.9	28.0	28.0	28.0
BL06A	5.4	4.9	6.3	15.3	14.9	15.7	7.8	7.7	8.0	28.0	28.0	28.0

Batch 1 - Ammonia and Sulfide Concentrations for the Larval Developmental Test with *Dendroaster excentricus*.

Treatment	Overlying Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)	
	Day 0	Day 3	Day 0	Day 3
Control	<0.5	<0.5	0.012	0.008
RF01A	<0.5	<0.5	0.032	0.003
RF02A	<0.5	<0.5	0.316	0.003
RF03A	<0.5	<0.5	0.444	0.007
BA01A	<0.5	<0.5	0.246	0.004
EH02A	<0.5	<0.5	0.358	0.006
FP01A	<0.5	<0.5	0.358	0.007
IE03A	<0.5	<0.5	0.366	0.009
IE04A	<0.5	<0.5	0.280	0.004
IE06A	<0.5	<0.5	0.366	0.010
IE14A	<0.5	<0.5	0.376	0.013
MA06A	<0.5	<0.5	0.340	0.008
MA05A	<0.5	<0.5	0.398	0.011
MA02A	<0.5	<0.5	0.528	0.003
IE15A	<0.5	<0.5	0.738	0.005
OH02A	<0.5	<0.5	0.398	0.009
FT11A	<0.5	<0.5	0.448	0.006
FT06A	<0.5	<0.5	0.394	0.007
KP06A	<0.5	<0.5	0.610	0.008
KP05A	<0.5	<0.5	0.418	0.005
BL06A	<0.5	<0.5	0.005	0.005

Batch 2 - Water Quality Summary for the 48-h Acute Test with *Dendroaster excentricus*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.0	6.9	7.1	15.9	15.6	16.1	8.0	7.7	8.2	28.0	28.0	28.0
RF03A	6.1	5.8	6.4	15.7	15.5	15.8	7.9	7.7	8.1	28.0	28.0	28.0
RF01A	7.2	6.9	7.3	15.7	15.6	15.9	8.0	7.7	8.1	28.0	28.0	28.0
RF02A	6.8	6.7	7.1	15.6	15.1	15.9	8.0	7.8	8.1	28.0	28.0	28.0
BL04A	6.7	4.7	8.1	15.7	15.2	16.2	8.0	7.9	8.1	28.0	28.0	28.0
BL03A	5.8	4.8	6.8	15.7	15.4	16.3	7.9	7.7	8.1	28.0	28.0	28.0
BL02A	5.8	5.0	6.3	15.7	15.5	16.2	7.9	7.7	8.0	28.0	28.0	28.0
EI07A	5.8	5.1	6.5	15.3	14.5	15.8	7.9	7.7	8.1	28.0	28.0	28.0
FT01A	6.1	5.2	6.5	15.6	15.4	16.1	7.9	7.7	8.1	28.0	28.0	28.0
FT04A	6.0	5.6	6.1	15.7	15.3	16.2	7.9	7.6	8.0	28.0	28.0	28.0
IE09A	5.8	4.4	7.5	15.8	15.3	16.1	7.9	7.8	7.9	28.0	28.0	28.0
IH01A	6.2	6.0	6.5	15.8	15.5	16.0	7.9	7.7	8.0	28.0	28.0	28.0
IH02A	5.4	5.1	5.9	15.7	15.1	16.1	7.8	7.6	7.9	28.0	28.0	28.0
IH03A	5.9	4.4	8.1	15.7	15.4	15.9	7.9	7.9	8.0	28.0	28.0	28.0
IH05A	5.8	5.5	6.1	15.5	15.3	16.0	7.9	7.6	8.0	28.0	28.0	28.0
IH06A	5.6	5.0	6.1	15.6	15.2	16.2	7.9	7.6	8.0	28.0	28.0	28.0
KP01A	5.5	5.1	5.8	15.5	15.4	15.6	7.8	7.6	8.0	28.0	28.0	28.0
KP02A	5.8	4.7	6.9	15.9	15.7	16.2	7.9	7.7	8.1	28.0	28.0	28.0
KP03A	6.0	5.6	6.4	15.5	15.1	15.9	7.9	7.6	8.0	28.0	28.0	28.0
MA01A	5.3	4.8	6.0	15.5	15.0	16.1	7.9	7.7	8.0	28.0	28.0	28.0
BL01A	6.7	5.9	7.2	15.8	15.5	16.1	7.9	7.7	8.0	28.0	28.0	28.0

Batch 2 - Ammonia and Sulfide Concentrations for the Larval Developmental Test with *Dendraster excentricus*.

Treatment	Overlying Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)	
	Day 0	Day 3	Day 0	Day 3
Control	<0.5	<0.5	0.008	0.000
RF03A	<0.5	<0.5	0.014	0.000
RF01A	<0.5	<0.5	0.006	0.000
RF02A	<0.5	<0.5	0.010	0.000
BL04A	<0.5	<0.5	0.012	0.000
BL03A	<0.5	<0.5	0.009	0.000
BL02A	<0.5	<0.5	0.012	0.001
EI07A	<0.5	<0.5	0.016	0.000
FT01A	<0.5	<0.5	0.017	0.000
FT04A	<0.5	<0.5	0.016	0.000
IE09A	<0.5	<0.5	0.023	0.004
IH01A	<0.5	<0.5	0.049	0.018
IH02A	<0.5	<0.5	0.026	0.005
IH03A	<0.5	<0.5	0.030	0.009
IH05A	<0.5	<0.5	0.024	0.004
IH06A	<0.5	<0.5	0.027	0.006
KP01A	<0.5	<0.5	0.017	0.002
KP02A	<0.5	<0.5	0.017	0.001
KP03A	<0.5	<0.5	0.014	0.002
MA01A	<0.5	<0.5	0.029	0.006
BL01A	<0.5	<0.5	0.019	0.002

Batch 3 - Water Quality Summary for the 48-h Acute Test with *Dendraster excentricus*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.5	7.0	8.1	15.0	14.5	15.3	7.8	7.6	7.9	28.0	28.0	28.0
RF01A	7.3	6.5	8.2	15.1	14.9	15.5	7.7	7.7	7.8	28.0	28.0	28.0
RF02A	7.2	6.8	7.9	14.8	14.5	15.1	7.8	7.7	7.9	28.0	28.0	28.0
RF03A	6.8	5.5	7.6	14.9	14.6	15.2	7.7	7.5	7.9	28.0	28.0	28.0
CO02A	6.2	4.8	7.6	15.0	14.7	15.3	7.8	7.6	7.9	28.0	28.0	28.0
DO03A	6.8	6.4	7.9	14.7	14.5	14.9	7.8	7.6	7.9	28.0	28.0	28.0
DO04A	6.7	6.0	7.8	14.9	14.5	15.3	7.7	7.4	7.9	28.0	28.0	28.0
DO05A	7.0	6.6	7.4	15.2	14.9	15.6	7.8	7.7	7.8	28.0	28.0	28.0
EC04A	6.5	5.7	7.4	15.0	14.7	15.6	7.7	7.7	7.8	28.0	28.0	28.0
ED03A	6.8	5.9	7.5	14.8	14.4	15.2	7.8	7.6	7.9	28.0	28.0	28.0
ED04A	6.0	3.8	7.6	15.2	14.7	15.8	7.9	7.8	7.9	28.0	28.0	28.0
ED05A	6.4	5.8	7.3	14.9	14.6	15.3	7.8	7.7	7.8	28.0	28.0	28.0
MD01A	6.5	6.1	7.2	14.9	14.5	15.1	7.7	7.6	7.8	28.0	28.0	28.0
MD02A	6.0	5.4	6.8	15.0	15.0	15.0	7.7	7.5	7.9	28.0	28.0	28.0
MD03A	6.2	4.9	7.8	14.8	14.7	14.9	7.8	7.6	7.9	28.0	28.0	28.0
WW01A	7.1	6.7	7.6	14.9	14.5	15.5	7.8	7.7	7.9	28.0	28.0	28.0

Batch 3 - Ammonia and Sulfide Concentrations for the Larval Developmental Test with *Dendroaster excentricus*.

Treatment	Overlying Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)	
	Day 0	Day 3	Day 0	Day 3
Control	<0.5	na	0.000	na
RF01A	<0.5	na	0.005	na
RF02A	<0.5	na	0.017	na
RF03A	<0.5	na	0.159	na
CO02A	<0.5	na	0.076	na
DO03A	<0.5	na	0.103	na
DO04A	<0.5	na	0.162	na
DO05A	<0.5	na	0.157	na
EC04A	<0.5	na	0.104	na
ED03A	<0.5	na	0.130	na
ED04A	1.740	na	0.186	na
ED05A	<0.5	na	0.098	na
MD01A	<0.5	na	0.119	na
MD02A	<0.5	na	0.151	na
MD03A	<0.5	na	0.106	na
WW01A	<0.5	na	0.179	na

na = not available

Batch 4 - Water Quality Summary for the 48-h Acute Test with *Dendraster excentricus*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			pH (units)			Salinity (ppt)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.6	7.2	8.0	15.5	14.9	15.9	7.8	7.6	8.0	28.0	28.0	28.0
RF01A	7.7	7.5	8.1	15.7	15.3	15.9	7.8	7.7	7.9	28.0	28.0	28.0
RF02A	7.7	7.4	8.0	16.0	15.8	16.0	7.9	7.8	7.9	28.0	28.0	28.0
RF03A	6.3	5.8	7.3	15.7	15.1	16.0	7.8	7.6	7.9	28.0	28.0	28.0
EI02A	7.2	6.8	7.9	15.7	15.1	16.0	7.8	7.6	7.9	28.0	28.0	28.0
IE07A	5.8	5.2	6.7	15.6	15.1	16.2	7.7	7.5	7.9	28.0	28.0	28.0
RL01A	6.7	6.2	7.7	15.9	15.5	16.4	7.7	7.5	7.9	28.0	28.0	28.0
RL02A	6.8	6.4	7.9	15.6	15.3	16.0	7.8	7.6	7.9	28.0	28.0	28.0
CO01A	7.4	7.0	7.9	16.0	15.9	16.0	7.8	7.8	7.9	28.0	28.0	28.0
CO04A	7.6	7.3	8.1	15.9	15.2	16.3	7.8	7.7	7.9	28.0	28.0	28.0
EC01A	7.5	7.1	8.0	15.7	15.0	16.4	7.7	7.5	7.8	28.0	28.0	28.0
EC02A	7.5	7.2	8.0	15.6	15.3	16.0	7.7	7.4	7.9	28.0	28.0	28.0
LA02A	7.2	6.5	7.7	15.8	15.4	16.0	7.8	7.7	7.9	28.0	28.0	28.0

Batch 4 - Ammonia and Sulfide Concentrations for the Larval Developmental Test with *Dendraster excentricus*.

Treatment	Overlying Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)	
	Day 0	Day 3	Day 0	Day 3
Control	<0.5	na	0.002	na
RF01A	<0.5	na	0.012	na
RF02A	<0.5	na	0.027	na
RF03A	<0.5	na	0.168	na
EI02A	<0.5	na	0.043	na
IE07A	<0.5	na	0.182	na
RL01A	<0.5	na	0.033	na
RL02A	<0.5	na	0.028	na
CO01A	<0.5	na	0.047	na
CO04A	<0.5	na	0.029	na
EC01A	<0.5	na	0.060	na
EC02A	<0.5	na	0.007	na
LA02A	<0.5	na	0.371	na

na = not available

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

APPENDIX B

LABORATORY DOCUMENTS

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

CHAIN OF CUSTODY

Chain of Custody Record & Laboratory Analysis Request

NEW 12-11-08

Analytical Resources, Incorporated
 Analytical Chemists and Consultants
 46711 South 134th Place, Suite 100
 Tukwila, WA 98168
 206-695-6300 206-699-6201 (fax)



Page: 1	of 1
Date: 6-11-08	Ice Present? <input checked="" type="checkbox"/>
No. of Coolers: 2	Cooler Temps: _____

ARI Assigned Number: AS Per contact	Turn-around Requested: _____
ARI Client Company: Ecology and Environment	Phone: _____
Client Contact: Pete Striplin	
Client Project Name: Port Angeles Harbor	
Client Project #: _____	Samplers: _____

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested						Notes/Comments	
RFO3A	6-10-08	1012	sediment	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		total 2 bags
RFO1A	6-10-08	1156	sediment	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		total 2 bags
RFO2A	6-10-08	1332	sediment	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		total 2 bags

Comments/Special Instructions	Relinquished by: (Signature)		Received by: (Signature)	
	Printed Name:	PETER STRIPLIN	Printed Name:	Brin Hester
	Company:	EN E	Company:	NatFields
	Date & Time:	6-10-08 1800	Date & Time:	6/11/08 0915

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

ORGANISM RECEIPT LOGS



ORGANISM RECEIPT LOG

Date: 6/25/06		Time: 1430		NewFields Batch No. NWA 7721	
Organism: Echaustorius			Source: Northwest Aquatics		
Address: On file				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On file			Contact: Gary		
No. Ordered: 4400		No. Received: 4400		Source Batch: Field	
Condition of Organisms: Good			Approximate Size or Age: 3-5mm		
Shipper: Fed Ex			B of L (Tracking No.) 8638 5866 7721		
Condition of Container: Good			Received By: BHL		
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)	
*			→	BHL	
Notes: shipped in moist sand, not enough liquid for analysis					



ORGANISM RECEIPT LOG

Date: 7/11/08		Time: 1345		NewFields Batch No. NAS 7824	
Organism: Eoh			Source: Northwestern Aquatics		
Address: On File				Invoice Attached <input checked="" type="radio"/> Yes <input type="radio"/> No	
Phone: On File			Contact: On File		
No. Ordered: 4200		No. Received: 4620		Source Batch: Field	
Condition of Organisms: Good			Approximate Size or Age: 3-5 mm		
Shipper: Fed. Ex			B of L (Tracking No.) 8638 5866 7824		
Condition of Container: Good			Received By: MMB		
Confirmation of ID of Organism: Yes <input checked="" type="radio"/> No				Technician (Initials): MMB	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
*	_____	_____	_____ →	MMB	
Notes: * Shipped in moist sand, no initial wq					



ORGANISM RECEIPT LOG

Date: MMS 7/23/08 24		Time: 1440		NewFields Batch No. NAS 9259	
Organism: Eoh			Source: Northwestern Aquatics		
Address: On File			Invoice Attached <input checked="" type="radio"/> Yes <input type="radio"/> No		
Phone: On File		Contact: On File			
No. Ordered: 2300		No. Received: 2530		Source Batch: Field collected	
Condition of Organisms: Good			Approximate Size or Age: 3-5 mm		
Shipper: Fed Ex			B of L (Tracking No.): 8662 6076 9259		
Condition of Container: Good			Received By: MMS		
Confirmation of ID of Organism: Yes <input checked="" type="radio"/> No				Technician (Initials): MMS	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
*	—————→		22 ppt	MMS	
Notes: * Shipped in moist sand, no initial WQ					



ORGANISM RECEIPT LOG

Date: 7/30/08		Time: 1400		NewFields Batch No. NAS 8662 6076 9307	
Organism: Eohs			Source: Northwestern Aquatic sciences		
Address: on file				Invoice Attached <input checked="" type="radio"/> Yes <input type="radio"/> No	
Phone:			Contact:		
No. Ordered: 1750		No. Received: 1925		Source Batch:	
Condition of Organisms: Good			Approximate Size or Age: 3-5mm		
Shipper: Fedex			B of L (Tracking No.) 8662 6076 9307		
Condition of Container: Good			Received By: TS		
Confirmation of ID of Organism: Yes No				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
NA			28	TS	
Notes:					



ORGANISM RECEIPT LOG

Date: 6/26/08		Time: 1800		NewFields Batch No. DR 9518	
Organism: Neurothos			Source: Don Porsch		
Address: Same				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: Same			Contact: Same		
No. Ordered: 1100		No. Received: 1100 +		Source Batch:	
Condition of Organisms: Good			Approximate Size or Age:		
Shipper: Fed ex			B of L (Tracking No.) 8659 4822 9518		
Condition of Container:			Received By: ✓		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials): NA	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
7.2	18.6	7.2	35	✓	
Notes:					



ORGANISM RECEIPT LOG

Date: 7/15/08		Time: 1845		NewFields Batch No. DR 0215	
Organism: Neantless			Source: Don Reish		
Address: On F.4				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On F.4			Contact: Don Reish		
No. Ordered: 640		No. Received: 640		Source Batch: Culture	
Condition of Organisms: Good			Approximate Size or Age: Adult		
Shipper: Fed Ex			B of L (Tracking No.) 8659 4822 0215		
Condition of Container: Good			Received By: BH		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input type="checkbox"/>				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
6.5	20.4	6.8	35	BH	
Notes:					



ORGANISM RECEIPT LOG

Date: 8/2/08		Time: 1400		NewFields Batch No. 8659 4822 9919 ^{DR}	
Organism: Nearthes			Source: Dan Deisch		
Address: on file				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone:			Contact:		
No. Ordered:		No. Received:		Source Batch:	
Condition of Organisms: Good			Approximate Size or Age:		
Shipper: Fedex			B of L (Tracking No.) 8659 4822 9919		
Condition of Container: Good			Received By: JS		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input type="checkbox"/>				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
7.0	14.5	7.0	25	JS	
Notes:					



ORGANISM RECEIPT LOG

Date: 7/21/08	Time: 1430	NewFields Batch No. FC072108		
Organism: Dendroste	Source: Field			
Address: NA		Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Phone: NA	Contact: NA			
No. Ordered: 150	No. Received: ~150	Source Batch: NA		
Condition of Organisms: Good		Approximate Size or Age: Adult		
Shipper: NF Courier	B of L (Tracking No.) NA			
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)
* Received dry, no wq				
Notes:				



ORGANISM RECEIPT LOG

Date: 7/24/08		Time: 1455		NewFields Batch No. FC072408	
Organism: Dendroaster			Source: Field		
Address: NA				Invoice Attached Yes <input type="radio"/> No <input checked="" type="radio"/>	
Phone: NA			Contact: NA		
No. Ordered:		No. Received: ~ 150		Source Batch: NA	
Condition of Organisms: Good			Approximate Size or Age: Adult		
Shipper: NF Carrier			B of L (Tracking No.): NA		
Condition of Container: Good			Received By: MMB		
Confirmation of ID of Organism: Yes <input type="radio"/> No <input checked="" type="radio"/>				Technician (Initials): MMB	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
* Received dry, no WQ					
Notes:					



ORGANISM RECEIPT LOG

Date: 7/29/08		Time: 1000		NewFields Batch No. FC072908	
Organism: Dendraster excentricus			Source: Field		
Address: NA				Invoice Attached Yes <input type="radio"/> No <input checked="" type="radio"/>	
Phone: NA			Contact: NA		
No. Ordered:		No. Received: 175		Source Batch: NA	
Condition of Organisms: Good			Approximate Size or Age: Adult		
Shipper: NF courier			B of L (Tracking No.): NA		
Condition of Container: Good			Received By: CR		
Confirmation of ID of Organism: Yes <input type="radio"/> No <input checked="" type="radio"/>				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
* Received		dry			
Notes:					

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

APPENDIX B

LABORATORY DOCUMENTS

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

AMPHIPOD TESTS

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR PROTOCOL		SPECIES															
Ecology & Environment		Port Angeles		1101-004-880		B. Hester		Port Gamble Bath 1, 2		Eohaustorius estuarius															
INITIAL # OF ORGANISMS		ENDPOINT DATA & OBSERVATIONS																							
20		REP	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	NUMBER REMAINING												
		REP	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	NUMBER REMAINING												
Control /	1	20	7/12	J	7/12	TS	7/13	TS	7/14	BM	7/15	MMB	7/16	MMB	7/17	MMB	7/18	MMB	7/19	J	7/19	CR	7/20	JW	19
	2	80																						19	
	3	41																						20	
	4	27																						20	
	5	18																						20	
RF01A /	1	32																						20	
	2	45																						18	
	3	83																						20	
	4	7																						17	
	5	52																						19	
RF02A /	1	42																						18	
	2	51																						20	
	3	73																						20	
	4	37																						20	
	5	55																						16	
RF03A /	1	65																						16	
	2	57																						19	
	3	39																						16	
	4	64																						18	
	5	48																						20	

3M
1 hour
24 hours

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR		PROTOCOL		SPECIES																						
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Garibaldi Bath 1, 2		PSEP 1995		Eohaustorius estuans																						
ENDPOINT DATA & OBSERVATIONS																																		
REP	JARS	INITIAL # OF ORGANISMS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	NUMBER REMAINING																			
																DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS													
1	76	20	7/2	J	N	7/3	JS	N	7/4	BH	N	7/5	MMB	N	7/6	MMB	N	7/7	MMB	N	7/8	MMB	N	7/9	V	N	7/10	CR	N	7/11	CR	N	16	
2	6																																	16
3	36																																17	
4	4																																20	
5	71																																17	
1	56																																17	
2	86																																20	
3	3																																20	
4	61																																19	
5	88																																19	
1	25																																18	
2	16																																19	
3	75																																19	
4	58																																18	
5	10																																20	
6	33																																20	
7	87																																17	
8	21																																16	
9	11																																12	
10	9																																15	

① IE, Airline off in rep 5, DO was 4.7mg/L. Airline function fixed. 7.7.08 BH
 ② Airline off, DO was 6.9mg/L. Airline fixed CR 7/10/08

1m
2m
3m
1m
2m
1m

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATORY PROTOCOL		SPECIES	
Ecology & Environment		Port Angeles		1101-004-660		B. Hester		Port Gamble Bath 1, 2		Eohaustorius estuarius	
CLIENT/NEWFIELDS ID		REP	JAR	INITIAL # OF ORGANISMS	DATE	TECHNICIAN	OBSERVNS	DATE	TECHNICIAN	OBSERVNS	NUMBER REMAINING
IE04A /		1	44	20	7/12	J	N	7/12	TS	N	19
		2	35		7/13	TS	N	7/13	TS	N	17
		3	79		7/14	BSH	N	7/14	BSH	N	18
		4	84		7/15	MMMB	N	7/15	MMMB	N	19
		5	82		7/16	MMMB	N	7/16	MMMB	N	18
IE06A /		1	38		7/17	MMMB	N	7/17	MMMB	N	19
		2	19		7/18	MMMB	N	7/18	MMMB	N	19
		3	66		7/19	MMMB	N	7/19	MMMB	N	20
		4	68		7/20	MMMB	N	7/20	MMMB	N	18
		5	13		7/21	MMMB	N	7/21	MMMB	N	17
IE14A /		1	69		7/22	MMMB	N	7/22	MMMB	N	15
		2	43		7/23	MMMB	N	7/23	MMMB	N	18
		3	26		7/24	MMMB	N	7/24	MMMB	N	15
		4	14		7/25	MMMB	N	7/25	MMMB	N	18
		5	8		7/26	MMMB	N	7/26	MMMB	N	17
IE15A /		1	60		7/27	MMMB	N	7/27	MMMB	N	14
		2	49		7/28	MMMB	N	7/28	MMMB	N	17
		3	15		7/29	MMMB	N	7/29	MMMB	N	17
		4	47		7/30	MMMB	N	7/30	MMMB	N	17
		5	23		7/31	MMMB	N	7/31	MMMB	N	18

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR PROTOCOL		SPECIES																
Ecology & Environment		Port Angeles		1101-004-880		B. Hester		Port Gamble Bath 1, 2		Eohaustofanus estuarius																
INITIAL # OF ORGANISMS		ENDPOINT DATA & OBSERVATIONS																								
20		REP	JAX	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	NUMBER REMAINING										
MA02A /		1	90	7/2	TS	7/3	TS	7/4	BH	7/5	MMB	7/6	MMB	7/7	MMB	7/8	MMB	7/9	J	7/10	CR	7/11	SM	17		
		2	78																						20	
		3	72																							18
		4	22																							20
		5	67																							18
MA05A /		1	12	7/2		7/3		7/4		7/5		7/6		7/7		7/8		7/9		7/10		7/11		19		
		2	50																						18	
		3	62																							17
		4	29																							19
		5	70																							20
MA06A /		1	24	7/2		7/3		7/4		7/5		7/6		7/7		7/8		7/9		7/10		7/11		15		
		2	63																						18	
		3	2																							13
		4	28																							14
		5	31																							18



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E+E/Port Angeles	Organism: Edn	NewFields Test ID: 1101-004-860	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 +1°C of standards temperature at time and date of analysis.
Date:	Temperature:	
7/1/08	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
Control	Surr.	7/1/08 CR	0.00	19	7/1/08 CR	N			0.005
RFO1A			0.00						0.004
RFO2A			0.779						0.015
RFO3A			2.76						0.002
BA01A			0.442						0.009
EH02A			1.41						0.022
FP01A			0.680						0.017
IE03A			0.068						0.022
IE04A			0.924						0.055
IE06A			0.347						0.033
IE14A			0.347						0.016
IE15A			0.867						0.009
MA02A			0.00						0.013
MA05A			0.303						0.026
MA06A	↓	↓	0.513	↓	↓	↓			0.010

NEWFIELDS

Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: E+E/ Port Angeles	Organism: Eoh	NewFields Test ID: 1101-004-860	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:	
7/11/08	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
 	SwD.	7/11/08, MMB	0.126	20.0	7/11/08, MMB	N	7.0	30	0.023
RF01A			0.0581				7.3	29	0.076
RF02A			2.63				7.4	29	0.134
RF03A			6.19				7.5	30	0.200
BA01A			2.42				7.6	30	0.215
EH02A			6.40				7.7	30	0.285 ①
FP01A			4.11				7.7	30	1.375 ①
IE03A			0.737				7.7	30	0.416
IE04A			0.00				7.7	31	0.269
IE06A			2.01				7.6	30	0.252
IE14A			2.51				7.7	31	0.327
IE15A			4.31				7.7	31	0.395
MA02A			0.00				7.7	30	0.220
MA05A			1.47				7.7	27	0.327
MA06A			1.76				7.6	30	0.207

① Used 5.0ml sample + 20.0ml DI = 25 ml; measurement used 5x multiplier

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E+E/Port Angeles	Organism: Eoh Batch 1	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:	
7/11/08	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
Control	surc	7/11/08 CR	<0.5	19	7/11/08	N			0.002
RFO1A	↓	↓	<0.5		↓	↓			0.008
RFO2A	↓	↓	0.00		↓	↓			0.008
RFO3A	↓	↓	1.10		↓	↓			0.028
BA01A	↓	↓	<0.5		↓	↓			0.019
EH02A	↓	↓	2.16		↓	↓			0.012
FPO1A	↓	↓	<0.5		↓	↓			0.004
IE03A	↓	↓	<0.5		↓	↓			0.027
IE04A	↓	↓	0.696		↓	↓			0.012
IE06A	↓	↓	1.26		↓	↓			0.005
IE14A	↓	↓	<0.5		↓	↓			0.044
IE15A	↓	↓	0.853		↓	↓			0.008
MA02A	↓	↓	<0.5		↓	↓			0.024
MA05A	↓	↓	<0.5		↓	↓			0.014
MA06A	↓	↓	<0.5		↓	↓			0.053



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: <i>E&E/Port Angeles</i>	Organism: <i>Edn Batch 1</i>	NewFields Test ID:	Test Duration (days): <i>10</i>
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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:	
<i>7/11/08</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>Control</i>	<i>sur.</i>	<i>7/11/08 MMB</i>	<i><0.5</i>	<i>20.0</i>	<i>7/11/08 CR</i>	<i>N</i>	<i>7.5</i>	<i>28</i>	<i>0.059</i>
<i>RF-01 A</i>	↓	↓	<i><0.5</i>		↓		<i>7.5</i>	<i>27</i>	<i>0.096</i>
<i>RF-02 A</i>	↓	↓	<i><0.5</i>		↓		<i>7.4</i>	<i>27</i>	<i>0.140</i>
<i>RF-03 A</i>	↓	↓	<i><0.5</i>		↓		<i>7.5</i>	<i>27</i>	<i>0.265</i>
<i>BA01 A</i>	↓	↓	<i>0.860</i>		↓		<i>7.5</i>	<i>28</i>	<i>0.291</i>
<i>EM02 A</i>	↓	↓	<i>3.46</i>		↓		<i>7.5</i>	<i>27</i>	<i>0.730</i>
<i>FP01 A</i>	↓	↓	<i>0.755</i>		↓		<i>7.5</i>	<i>27</i>	<i>0.556</i>
<i>IE03 A</i>	↓	↓	<i>0.671</i>		↓		<i>7.4</i>	<i>28</i>	<i>0.384</i>
<i>IE04 A</i>	↓	↓	<i>2.17</i>		↓		<i>7.6</i>	<i>28</i>	<i>0.191</i>
<i>IE06 A</i>	↓	↓	<i>1.99</i>		↓		<i>7.4</i>	<i>28</i>	<i>0.167</i>
<i>IE14 A</i>	↓	↓	<i>0.603</i>		↓		<i>7.3</i>	<i>28</i>	<i>0.242</i>
<i>IE15 A</i>	↓	↓	<i>2.96</i>		↓		<i>7.6</i>	<i>28</i>	<i>0.324</i>
<i>MA02 A</i>	↓	↓	<i><0.5</i>		↓		<i>7.0</i>	<i>28</i>	<i>0.393</i>
<i>MA05 A</i>	↓	↓	<i>0.974</i>		↓		<i>7.5</i>	<i>26</i>	<i>0.272</i>
<i>MA06 A</i>	↓	↓	<i>1.38</i>		↓		<i>7.6</i>	<i>28</i>	<i>0.364</i>



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hesler	START TIME/END TIME 0930 /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Echauslorius estuarinus</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB0# NA	TEST START DATE 1-Jul-2008	TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Date
				meter	D.O.	meter	°C	meter	ppt	meter	unit		
Control /	0	Surr	59	4	8.7	4	15.6	R	28	1	8.0	J	7/1/08
Control /	1	Surr	59	4	8.5	4	15.5	R	29	1	8.0	J	7/2/08
Control /	2	Surr	59	4	8.3	4	15.6	R	28	1	8.1	TS	7/3/08
Control /	3	Surr	59	4	8.4	4	15.4	R	28	1	8.1	BH	7/4/08
Control /	4	Surr	59	4	8.2	4	16.6	R	30	1	8.0	MMMB	7/5/08
Control /	5	Surr	59	4	8.4	4	15.9	R	30	5	8.1	MMMB	7/6/08
Control /	6	Surr	59	4	8.3	4	15.7	R	28	5	7.8	CR	7/7/08
Control /	7	Surr	59	4	8.5	4	15.4	R	30	5	8.2	J	7/8/08
Control /	8	Surr	59	4	9.1	4	15.5	R	28	5	7.7	J	7/9/08
Control /	9	Surr	59	4	8.6	4	15.5	R	28	5	8.3	CR	7/10/08
Control /	10	Surr	59	4	9.0	4	15.4	R	28	5	7.7	J	7/11/08
RF01A /	0	Surr	81	4	8.5	4	15.7	R	28	1	7.9	J	7/1/08
RF01A /	1	Surr	81	4	8.4	4	15.4	R	28	1	8.0	J	7/2/08
RF01A /	2	Surr	81	4	8.1	4	15.7	R	28	1	7.7	TS	7/3/08
RF01A /	3	Surr	81	4	8.4	4	15.4	R	28	1	8.0	BH	7/4/08
RF01A /	4	Surr	81	4	8.4	4	15.5	R	30	1	8.1	MMMB	7/5/08
RF01A /	5	Surr	81	4	8.7	4	15.7	R	30	5	8.1	MMMB	7/6/08
RF01A /	6	Surr	81	4	8.5	4	15.4	R	28	5	8.2	CR	7/7/08
RF01A /	7	Surr	81	4	8.5	4	15.4	R	30	5	8.2	J	7/8/08
RF01A /	8	Surr	81	4	9.2	4	15.2	R	30	5	8.2	J	7/9/08
RF01A /	9	Surr	81	4	8.6	4	15.3	R	28	5	8.3	CR	7/10/08
RF01A /	10	Surr	81	4	9.0	4	14.9	R	29	5	8.3	J	7/11/09



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB#	TEST START DATE 1-Jul-2008
				TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	unit		
RF02A/	0	Surr	40	4	8.4	4	15.9	R	29	1	7.9	A	7/1/08
RF02A/	1	Surr	40	4	8.5	4	15.2	R	28	1	8.0	L	7/2/08
RF02A/	2	Surr	40	4	8.3	4	15.6	R	28	1	8.1	TS	7/3/08
RF02A/	3	Surr	40	4	8.7	4	15.5	R	28	1	8.1	BH	7/4/08
RF02A/	4	Surr	40	4	8.2	4	15.8	R	30	1	8.0	MMS	7/5/08
RF02A/	5	Surr	40	4	8.5	4	16.2	R	30	5	8.1	MMS	7/6/08
RF02A/	6	Surr	40	4	8.4	4	15.5	R	29	5	8.1	CR	7/7/08
RF02A/	7	Surr	40	4	8.4	4	15.5	R	29	5	8.1	A	7/8/08
RF02A/	8	Surr	40	4	9.1	4	15.4	R	28	5	8.2	A	7/9/08
RF02A/	9	Surr	40	4	8.6	4	15.4	R	28	5	8.3	CR	7/10/08
RF02A/	10	Surr	40	4	8.9	4	15.2	R	29	5	8.4	A	7/11/08
RF03A/	0	Surr	77	4	8.5	4	15.7	R	28	1	7.3	A	7/1/08
RF03A/	1	Surr	77	4	8.7	4	14.6	R	29	1	8.0	A	7/2/08
RF03A/	2	Surr	77	4	8.2	4	15.2	R	28	1	7.6	TS	7/3/08
RF03A/	3	Surr	77	4	8.2	4	15.5	R	28	1	8.1	BH	7/4/08
RF03A/	4	Surr	77	4	8.3	4	15.6	R	30	1	8.1	MMS	7/5/08
RF03A/	5	Surr	77	4	8.6	4	15.6	R	30	5	8.2	MMS	7/6/08
RF03A/	6	Surr	77	4	8.4	4	15.4	R	29	5	8.1	CR	7/7/08
RF03A/	7	Surr	77	4	8.4	4	15.5	R	30	5	8.1	A	7/8/08
RF03A/	8	Surr	77	4	9.2	4	15.0	R	28	5	8.3	A	7/9/08
RF03A/	9	Surr	77	4	8.6	4	15.3	R	28	5	8.2	CR	7/10/08
RF03A/	10	Surr	77	4	8.9	4	15.0	R	29	5	8.4	A	7/11/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB#	TEST START DATE 1-Jul-2008
				TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
BA01A/	0	Surr	54	4	8.6	4	15.7	R	29	1	8.0	A	7/1/08
BA01A/	1	Surr	54	4	8.3	4	15.6	R	29	1	8.0	A	7/2/08
BA01A/	2	Surr	54	4	8.3	4	15.6	R	28	1	8.0	TS	7/3/08
BA01A/	3	Surr	54	4	8.2	4	15.3	R	29	1	8.0	BA	7/4/08
BA01A/	4	Surr	54	4	8.4	4	15.1	R	30	1	7.9	MMB	7/5/08
BA01A/	5	Surr	54	4	8.4	4	16.1	R	30	5	8.1	MMB	7/6/08
BA01A/	6	Surr	54	4	8.1	4	15.9	R	29	5	7.9	CR	7/7/08
BA01A/	7	Surr	54	4	8.3	4	15.5	R	30	5	8.3	A	7/8/08
BA01A/	8	Surr	54	4	9.2	4	14.9	R	29	5	7.8	A	7/9/08
BA01A/	9	Surr	54	4	8.5	4	15.5	R	29	5	8.3	CR	7/10/08
BA01A/	10	Surr	54	4	8.6	4	15.1	R	30	5	8.7	A	7/11/08
EH02A/	0	Surr	89	4	8.7	4	15.4	R	28	1	8.1	A	7/11/08
EH02A/	1	Surr	89	4	7.5	4	15.4	R	29	1	8.0	A	7/2/08
EH02A/	2	Surr	89	4	8.3	4	15.5	R	28	1	7.8	TS	7/3/08
EH02A/	3	Surr	89	4	8.3	4	15.6	R	29	1	8.2	BA	7/4/08
EH02A/	4	Surr	89	4	8.4	4	15.4	R	30	1	8.1	MMB	7/5/08
EH02A/	5	Surr	89	4	8.6	4	15.7	R	31	5	8.2	MMB	7/6/08
EH02A/	6	Surr	89	4	8.5	4	15.3	R	28	5	8.1	CR	7/7/08
EH02A/	7	Surr	89	4	8.6	4	15.3	R	30	5	8.2	A	7/8/08
EH02A/	8	Surr	89	4	9.2	4	15.2	R	29	5	8.3	A	7/9/08
EH02A/	9	Surr	89	4	8.6	4	15.6	R	29	5	8.1	CR	7/10/08
EH02A/	10	Surr	89	4	9.0	4	14.9	R	30	5	8.3	A	7/11/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB#	TEST START DATE 1-Jul-2008	TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	unit		
FP01A /	0	Surr	30	4	8.7	4	15.4	R	29	1	8.0	J	7/1/08
FP01A /	1	Surr	30	4	8.4	4	15.5	R	29	1	7.9	J	7/2/08
FP01A /	2	Surr	30	4	8.3	4	15.6	R	29	1	8.0	TS	7/3/08
FP01A /	3	Surr	30	4	8.4	4	15.2	R	29	1	8.1	BH	7/4/08
FP01A /	4	Surr	30	4	8.0	4	16.1	R	30	1	8.1	MMBS	7/5/08
FP01A /	5	Surr	30	4	8.4	4	16.3	R	30	5	8.2	MMBS	7/6/08
FP01A /	6	Surr	30	4	8.3	4	15.5	R	29	5	8.1	CR	7/7/08
FP01A /	7	Surr	30	4	8.4	4	15.5	R	29	5	8.1	J	7/8/08
FP01A /	8	Surr	30	4	7.0	4	15.4	R	28	5	8.2	W	7/9/08
FP01A /	9	Surr	30	4	8.7	4	15.2	R	29	5	8.3	CR	7/10/08
FP01A /	10	Surr	30	4	8.9	4	15.0	R	28	5	8.3	J	7/11/08
IE03A /	0	Surr	34	4	8.7	4	15.5	R	29	1	8.0	J	7/1/08
IE03A /	1	Surr	34	4	8.5	4	15.5	R	28	1	7.9	F	7/2/08
IE03A /	2	Surr	34	4	8.2	4	15.5	R	29	1	8.0	TS	7/3/08
IE03A /	3	Surr	34	4	8.2	4	15.2	R	29	1	8.0	BH	7/4/08
IE03A /	4	Surr	34	4	8.2	4	15.8	R	30	1	8.0	MMBS	7/5/08
IE03A /	5	Surr	34	4	8.5	4	15.9	R	30	5	8.1	MMBS	7/6/08
IE03A /	6	Surr	34	4	8.4	4	15.5	R	29	5	8.1	CR	7/7/08
IE03A /	7	Surr	34	4	8.4	4	15.5	R	30	5	8.1	J	7/8/08
IE03A /	8	Surr	34	4	9.0	4	15.3	R	29	5	8.3	J	7/9/08
IE03A /	9	Surr	34	4	8.7	4	15.3	R	29	5	8.2	CR	7/10/08
IE03A /	10	Surr	34	4	8.9	4	15.2	R	30	5	8.3	J	7/11/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/ END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB#	TEST START DATE 1-Jul-2008	TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	unit		
IE04A/	0	Surr	85	4	8.6	4	15.5	R	28	1	8.0	J	7/1/08
IE04A/	1	Surr	85	4	8.2	4	15.7	R	29	1	7.9	J	7/2/08
IE04A/	2	Surr	85	4	8.2	4	15.5	R	28	1	7.8	TS	7/3/08
IE04A/	3	Surr	85	4	8.4	4	15.2	R	29	1	8.0	BK	7/4/08
IE04A/	4	Surr	85	4	8.3	4	15.5	R	30	1	8.0	MMMB	7/5/08
IE04A/	5	Surr	85	4	8.7	4	15.4	R	30	5	8.1	MMMB	7/6/08
IE04A/	6	Surr	85	4	8.4	4	15.3	R	30	5	8.1	CR	7/7/08
IE04A/	7	Surr	85	4	8.5	4	15.4	R	31	5	8.1	J	7/8/08
IE04A/	8	Surr	85	4	9.1	4	15.2	R	30	5	8.2	J	7/9/08
IE04A/	9	Surr	85	4	8.5	4	15.4	R	29	5	8.2	UR	7/10/08
IE04A/	10	Surr	85	4	9.0	4	15.0	R	30	5	8.4	J	7/11/08
IE06A/	0	Surr	74	4	8.5	4	15.7	R	29	1	8.0	J	7/1/08
IE06A/	1	Surr	74	4	8.5	4	15.5	R	29	1	8.0	J	7/2/08
IE06A/	2	Surr	74	4	8.1	4	15.8	R	29	1	7.4	TS	7/3/08
IE06A/	3	Surr	74	4	8.3	4	14.9	R	29	1	8.0	BK	7/4/08
IE06A/	4	Surr	74	4	8.2	4	15.6	R	31	1	7.9	MMMB	7/5/08
IE06A/	5	Surr	74	4	8.5	4	15.8	R	30	5	8.1	MMMB	7/6/08
IE06A/	6	Surr	74	4	8.3	4	15.6	R	30	5	8.0	CR	7/7/08
IE06A/	7	Surr	74	4	8.4	4	15.5	R	31	5	8.0	MMMB	7/8/08
IE06A/	8	Surr	74	4	8.9	4	15.2	R	30	5	8.3	J	7/9/08
IE06A/	9	Surr	74	4	8.5	4	15.3	R	29	5	8.2	CR	7/10/08
IE06A/	10	Surr	74	4	8.8	4	15.1	R	30	5	8.4	J	7/11/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB0#	TEST START DATE 1-Jul-2008
				TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	unit		
IE14A/	0	Surr	53	4	8.6	4	15.8	K	28	1	7.9	J	7/1/08
IE14A/	1	Surr	53	4	8.4	4	15.6	R	29	1	8.0	J	7/2/08
IE14A/	2	Surr	53	4	8.2	4	15.6	R	29	1	8.0	TS	7/3/08
IE14A/	3	Surr	53	4	8.3	4	15.4	R	29	1	8.0	BH	7/4/08
IE14A/	4	Surr	53	4	8.2	4	15.7	R	31	1	8.0	MMP	7/5/08
IE14A/	5	Surr	53	4	8.4	4	16.0	R	30	5	8.1	MMS	7/6/08
IE14A/	6	Surr	53	4	8.2	4	15.7	R	29	5	8.2	CR	7/7/08
IE14A/	7	Surr	53	4	8.4	4	15.5	R	30	5	8.3	A	7/8/08
IE14A/	8	Surr	53	4	8.9	4	15.4	R	28	5	8.5	A	7/9/08
IE14A/	9	Surr	53	4	8.4	4	15.5	R	29	5	8.5	CR	7/10/08
IE14A/	10	Surr	53	4	9.0	4	14.9	R	29	5	8.7	A	7/11/08
IE15A/	0	Surr	17	4	8.6	4	15.4	R	29	1	8.0	A	7/11/08
IE15A/	1	Surr	17	4	8.3	4	15.6	R	29	1	7.7	J	7/2/08
IE15A/	2	Surr	17	4	7.9	4	15.7	R	29	1	8.0	TS	7/3/08
IE15A/	3	Surr	17	4	8.1	4	15.7	R	29	1	8.0	BH	7/4/08
IE15A/	4	Surr	17	4	8.0	4	16.1	R	30	1	8.1	MMS	7/5/08
IE15A/	5	Surr	17	4	8.4	4	16.7	R	30	5	8.3	MMS	7/6/08
IE15A/	6	Surr	17	4	8.3	4	15.5	R	29	5	8.1	CR	7/7/08
IE15A/	7	Surr	17	4	8.2	4	15.4	R	29	5	8.1	A	7/8/08
IE15A/	8	Surr	17	4	8.8	4	15.6	R	30	5	8.3	A	7/9/08
IE15A/	9	Surr	17	4	8.4	4	15.6	R	30 30	5	8.3	CR	7/10/08
IE15A/	10	Surr	17	4	9.0, 9.7	4	14.9, 15.2	R	30	5	8.2	A	7/11/08

correct entry = 30 ppt CR 7/10/08
 we 7/11/08 ↓



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB#	TEST START DATE 1-Jul-2008
				TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
MA02A /	0	Surr	5	4	8.3	4	15.6	R	29	1	7.6	J	7/1/08
MA02A /	1	Surr	5	4	8.0	4	15.8	R	29	1	7.4	J	7/2/08
MA02A /	2	Surr	5	4	7.9	4	15.6	R	29	1	8.0	TS	7/3/08
MA02A /	3	Surr	5	4	8.0	4	15.4	R	29	1	8.1	BH	7/4/08
MA02A /	4	Surr	5	4	7.7	4	16.3	R	30	1	8.2	MMMB	7/5/08
MA02A /	5	Surr	5	4	8.0	4	16.2	R	30	5	8.5	MMMB	7/6/08
MA02A /	6	Surr	5	4	8.0	4	15.6	R	29	5	8.7	CR	7/7/08
MA02A /	7	Surr	5	4	7.9	4	15.6	R	29	5	8.4	J	7/8/08
MA02A /	8	Surr	5	4	8.6	4	15.4	R	29	5	8.5	J	7/9/08
MA02A /	9	Surr	5	4	8.2	4	15.4	R	29	5	8.6	CR	7/10/08
MA02A /	10	Surr	5	4	8.6	4	15.2	R	30	5	8.5	J	7/11/08
MA05A /	0	Surr	1	4	8.1	4	16.2	R	28	1	7.7	J	7/1/08
MA05A /	1	Surr	1	4	8.1	4	15.8	R	28	1	7.1	J	7/2/08
MA05A /	2	Surr	1	4	8.0	4	15.7	R	27	1	8.0	TS	7/3/08
MA05A /	3	Surr	1	4	8.0	4	15.8	R	27	1	7.9	BH	7/4/08
MA05A /	4	Surr	1	4	7.8	4	16.5	R	27	1	8.1	MMMB	7/5/08
MA05A /	5	Surr	1	4	8.3	4	16.4	R	28	5	8.0	MMMB	7/6/08
MA05A /	6	Surr	1	4	7.9	4	15.7	R	28	5	8.2	CR	7/7/08
MA05A /	7	Surr	1	4	8.1	4	15.7	R	27	5	7.9	J	7/8/08
MA05A /	8	Surr	1	4	8.5	4	15.3	R	27	5	8.0	J	7/9/08
MA05A /	9	Surr	1	4	8.5	4	15.6	R	28	5	8.3	CR	7/10/08
MA05A /	10	Surr	1	4	8.7	4	15.3	R	27	5	8.0	J	7/11/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

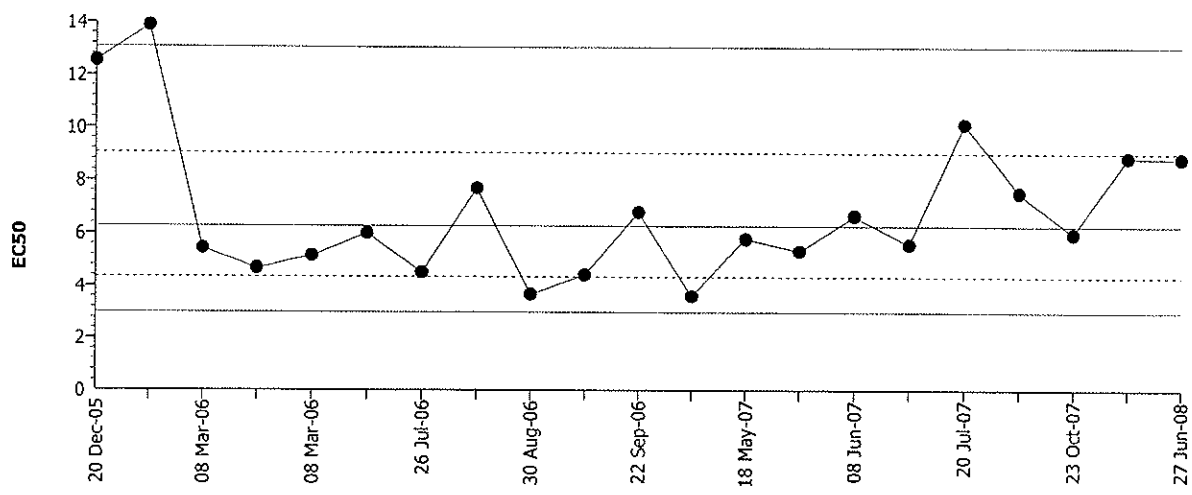
CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW063008.01	TEST SPECIES <i>Echaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 1, 2	TEMP. RECDR./HOB#	TEST START DATE 1-Jul-2008
				TEST END DATE 11-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Date
				meter	mg/L	meter	°C	meter	ppt	meter	unit		
MA06A/	0	Surr	46	4	8.7	4	15.5	R	29	1	8.0	J	7/1/08
MA06A/	1	Surr	46	4	8.3	4	15.6	R	29	1	7.9	J	7/2/08
MA06A/	2	Surr	46	4	8.2	4	15.6	R	29	1	8.0	TS	7/3/08
MA06A/	3	Surr	46	4	8.2	4	15.4	R	29	1	8.0	BH	7/4/08
MA06A/	4	Surr	46	4	8.2	4	15.8	R	30	1	8.0	MMMB	7/5/08
MA06A/	5	Surr	46	4	8.4	4	16.2	R	30	5	8.1	MMMB	7/6/08
MA06A/	6	Surr	46	4	8.3	4	15.5	R	30	5	8.2	CR	7/7/08
MA06A/	7	Surr	46	4	8.5	4	15.4	R	30	5	8.0	A	7/8/08
MA06A/	8	Surr	46	4	9.2	4	14.9	R	29	5	8.3	X	7/9/08
MA06A/	9	Surr	46	4	8.6	4	15.4	R	29	5	8.2	CR	7/10/08
MA06A/	10	Surr	46	4	8.7	4	15.3	R	29	5	8.5	A	7/11/08

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: 6.26275 Count: 20 -1s Warning Limit: 4.3345 -2s Action Limit: 2.99994
 Sigma: CV: 44.49% +1s Warning Limit: 9.04882 +2s Action Limit: 13.0743

Quality Control Data												
Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis		
1	2005	Dec	20	12.54248	6.27973	1.88716	(+)		10-3071-5596	08-1564-2394		
2			20	13.88309	7.62034	2.16310	(+)	(+)	17-0353-9586	13-0250-3970		
3	2006	Mar	8	5.42834	-0.83441	-0.38854			10-3794-9585	01-7619-3108		
4			8	4.66335	-1.59940	-0.80129			15-5983-1973	01-8530-0758		
5			8	5.13594	-1.12681	-0.53899			12-6238-5677	07-4588-5444		
6		Jun	22	5.99057	-0.27218	-0.12074			17-1591-2461	05-4082-2230		
7		Jul	26	4.50104	-1.76171	-0.89755			10-7443-1576	14-0796-2659		
8		Aug	11	7.69040	1.42765	0.55800			16-1376-4953	18-3640-7612		
9			30	3.67616	-2.58660	-1.44764	(-)		05-1254-4340	07-4470-1159		
10		Sep	13	4.41009	-1.85267	-0.95302			10-9673-5864	09-7524-5460		
11			22	6.78907	0.52631	0.21927			05-2196-6286	15-5008-9467		
12			27	3.60821	-2.65454	-1.49833	(-)		14-2711-1162	15-3243-2698		
13	2007	May	18	5.78633	-0.47642	-0.21499			10-9949-6658	01-0514-6184		
14			22	5.32422	-0.93853	-0.44116			02-6215-7262	07-0555-3037		
15		Jun	8	6.65260	0.38985	0.16409			08-1478-6281	07-1616-4889		
16			12	5.57512	-0.68763	-0.31604			12-4873-2529	01-1576-1244		
17		Jul	20	10.14752	3.88477	1.31139	(+)		03-1740-6698	15-0085-4047		
18		Sep	17	7.52045	1.25770	0.49728			13-0115-1998	01-0589-8584		
19		Oct	23	5.97296	-0.28979	-0.12874			06-8083-9702	00-5598-3388		
20	2008	May	30	8.87317	2.61042	0.94674			13-3382-4100	20-7672-2429		
21		Jun	27	8.83113	2.56838	0.93383			14-3368-4084	04-4152-2772		

CETIS Analysis Detail

Linear Regression: Page 1 of 2
 Report Date: 08 Jul-08 2:26 PM
 Analysis: 04-4152-2772

Eohaustorius 10-d Survival and Reburial Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Regression	14-3368-4084	14-3368-4084	08 Jul-08 2:26 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	0.06666667	Yes	Yes	No	No

Regression Summary

Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)
24	-43.52952	0.01098	0.19140	0.18904	8.52079	22.36203	0.80810	Non-Significant Heterogeneity

Point Estimates

% Effect	Conc-µg/L	95% LCL	95% UCL
10	5.020292	2.684818	6.623237
15	5.592994	3.226477	7.193821
20	6.094403	3.728028	7.694251
25	6.560243	4.21362	8.163592
40	7.898163	5.68114	9.569587
50	8.831133	6.727149	10.64352

Test Acceptability

Attribute	Statistic	TAC Range	Overlap	Decision
Control Response	0.93333	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	0.1119443	0.0409192	0.03174273	0.192146	2.736	0.01699	Significant
Slope	5.224693	1.158995	2.953063	7.496324	4.508	0.00059	Significant
Intercept	0.05735433	1.110603	-2.119428	2.234137	0.052	0.95960	Not Significant

Residual Analysis

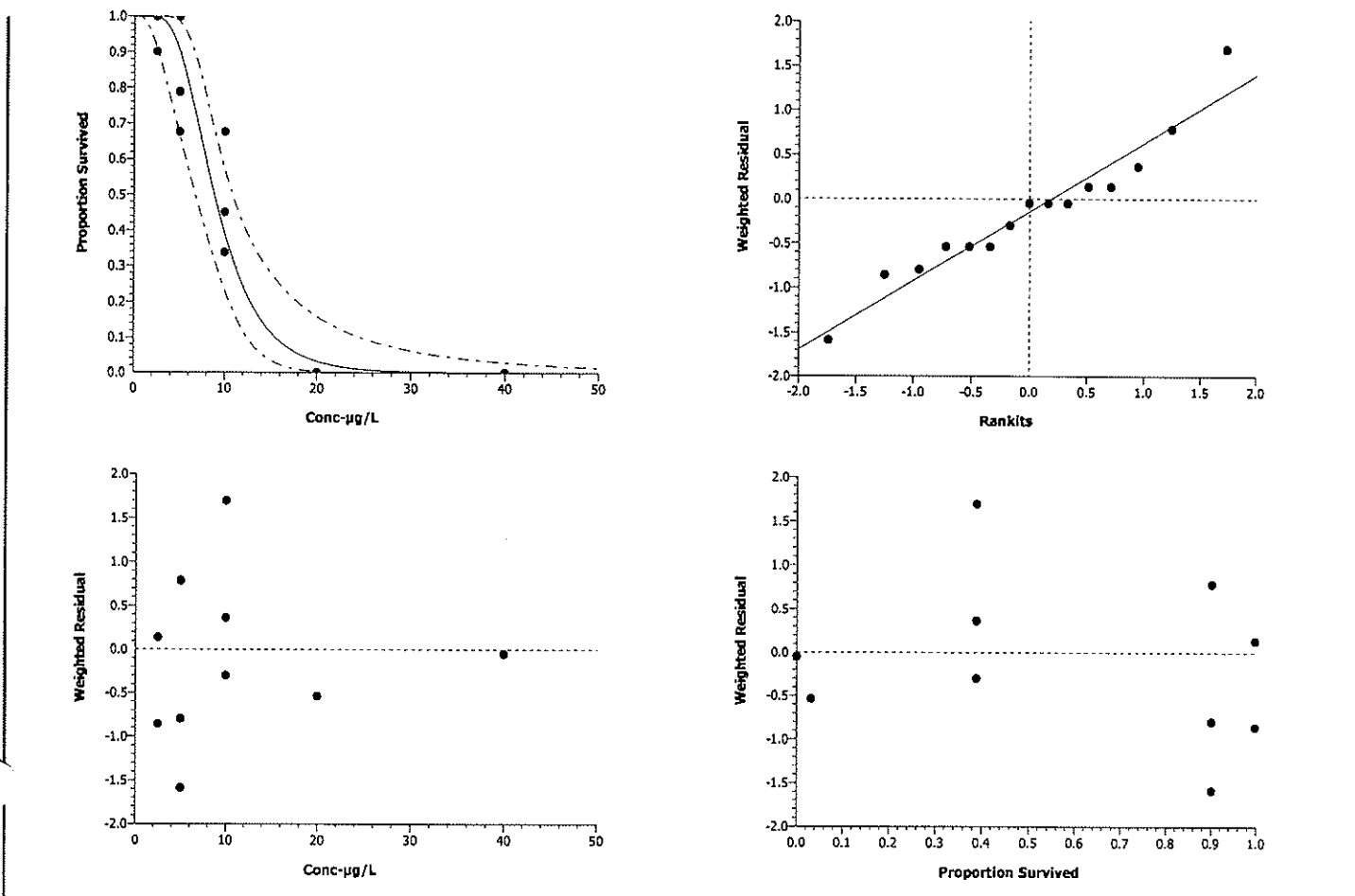
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)
Variances	Modified Levene	8.217675	3.47805	0.00334	Unequal Variances
Distribution	Shapiro-Wilk W	0.9533266		0.57828	Normal Distribution

Data Summary

Conc-µg/L	Control Type	Count	Calculated Variate(A/B)						
			Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.93333	0.90000	1.00000	0.01179	0.05773	28	30
2.5		3	0.86667	0.80000	0.90000	0.01179	0.05773	26	30
5		3	0.73333	0.60000	0.90000	0.03118	0.15275	22	30
10		3	0.43333	0.30000	0.60000	0.03118	0.15275	13	30
20		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30

CETIS Analysis Detail

Graphics



CETIS Analysis Detail

Eohaustorius 10-d Survival and Reburial Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	14-3368-4084	14-3368-4084	08 Jul-08 2:26 PM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnnett's Multiple Comparison	C > T	Angular (Corrected)		5	10	20	7.07107	20.90%

Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.91079	2.41651	0.3751	0.26963	Non-Significant Effect
		5	2.34168	2.41651	0.0559	0.26963	Non-Significant Effect
		10	5.25701	2.41651	0.0010	0.26963	Significant Effect

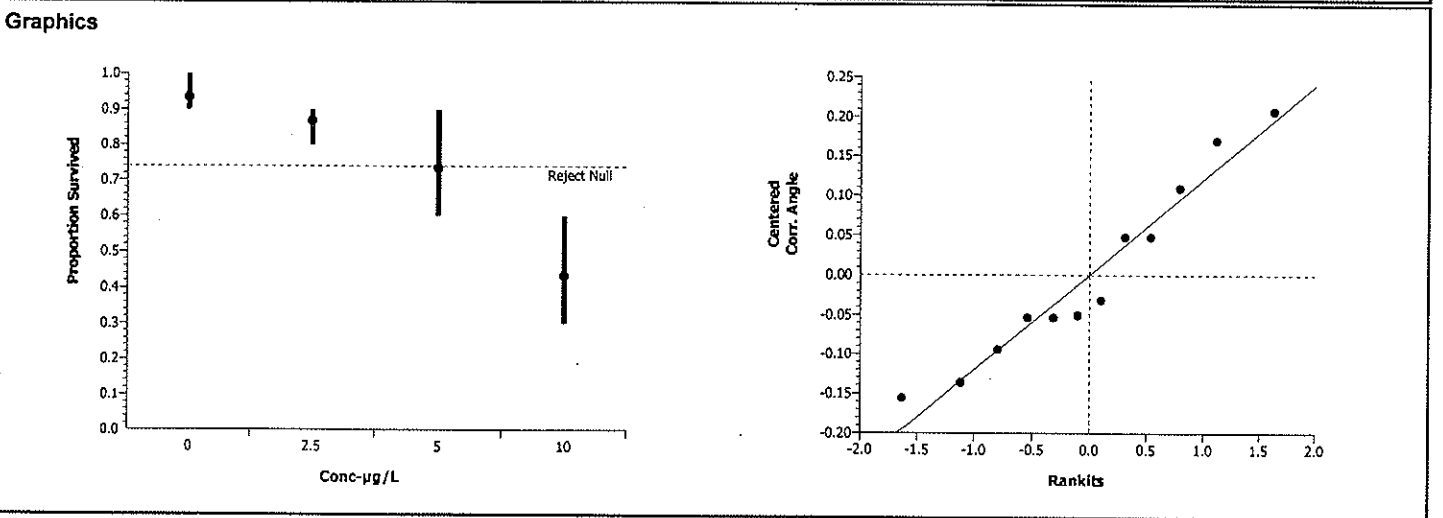
Test Acceptability				
Attribute	Statistic	TAC Range	Overlap	Decision
Control Response	0.93333	0.9 - NL	Yes	Passes acceptability criteria

ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	0.5918253	0.1972751	3	10.56	0.00372	Significant Effect
Error	0.1493912	0.0186739	8			
Total	0.7412165	0.2159490	11			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	1.46245	11.34487	0.69096	Equal Variances
Distribution	Shapiro-Wilk W	0.93827		0.47601	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	0.93333	0.90000	1.00000	0.05773	1.30337	1.24905	1.41202	0.09409	
2.5		3	0.86667	0.80000	0.90000	0.05773	1.20175	1.10715	1.24905	0.08192	
5		3	0.73333	0.60000	0.90000	0.15275	1.04209	0.88608	1.24905	0.18677	
10		3	0.43333	0.30000	0.60000	0.15275	0.71681	0.57964	0.88608	0.15572	

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	0.90000	1.00000							
2.5		0.80000	0.90000	0.90000							
5		0.60000	0.90000	0.70000							
10		0.60000	0.30000	0.40000							





Cadmium Reference Toxicant Test Water Quality Data Sheet for Eohs

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 0 TEST ID P080418.04	PROJECT Port Angeles PROJECT MANAGER 0 LOT #: 06510TC	SPECIES Eohaustorius estuarius QUANTITY OF STOCK: 6.0ml ACTUAL: 6.00475 TEST START DATE 27Jun08	NEWFIELDS LABORATORY Port Gamble Room 1 INIT B DATE PREP 6/27/08 TIME 1600 TEST END DATE 01Jul08
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WATER QUALITY DATA

DILTN.WAT.BATCH FSW062508.01	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT		LOT NO.	96-H LC ₅₀									
		cadmium chloride		cadmium												
TEST CONDITIONS																
CLIENT/ NEWFIELDS ID	CONCENTRATION		D.O.	TEMP.		SALINITY	pH	WG TECH	AMMONIA		SULFIDES					
	value	units		meter	mg/L				meter	°C	meter	ppt	meter	unit	meter	mg/L
Ref.Tox.-cadmium	0	mg/L	4	7.6	4	15.8	1	R	29	1	7.8	CR				
Ref.Tox.-cadmium	2.5	mg/L	4	7.8	4	15.8	1	R	29	1	7.0	MMB				
Ref.Tox.-cadmium	5	mg/L	4	7.8	4	15.6	1	R	29	1	8.0	CR				
Ref.Tox.-cadmium	10	mg/L	4	7.9	4	15.5	1	R	29	1	7.2	MMB				
Ref.Tox.-cadmium	20	mg/L	4	7.8	4	15.6	1	R	29	1	8.0	CR				
Ref.Tox.-cadmium	40	mg/L	4	7.9	4	15.5	1	R	29	1	7.4	MMB				
Ref.Tox.-cadmium	0	mg/L	4	7.9	4	15.5	1	R	29	1	8.0	CR				
Ref.Tox.-cadmium	4	mg/L	4	8.2	4	15.5	1	R	29	1	7.5	MMB				
Ref.Tox.-cadmium	0	mg/L	4	7.9	4	15.5	1	R	29	1	8.1	CR				
Ref.Tox.-cadmium	4	mg/L	4	8.3	4	15.4	1	R	29	1	7.6	MMB				
Ref.Tox.-cadmium	0	mg/L	4	7.9	4	15.5	1	R	29	1	8.0	CR				
Ref.Tox.-cadmium	4	mg/L	4	8.4	4	15.5	1	R	29	1	7.6	MMB				

Cadmium Reference Toxicant Test Survival Data Sheet for Eohs



SPECIES		
<i>Eohaustorius estuarius</i>		
CLIENT	PROJECT	NEWFIELDS JOB NO.
Ecology & Environment	Port Angeles	0
PROJECT MANAGER	NEWFIELDS LABORATORY	PROTOCOL
0	Port Gamble Room 1	PSEP 1995

SURVIVAL & BEHAVIOR DATA

OBSERVATION KEY N = Normal LOE = Loss of equilibrium Q = Quinscent DC = Discoloration NB = No body NB = No body F = Floating on surface				DATE			DATE			DATE			DATE			
				6/28			6/29			6/30			7/1			
INITIAL # OF ORGANISMS				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
10				TS			TS			TS			MMB			
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	10	10	0	35	9	1	45	9	0	35	9	0	2F
			2		9	1NB	45	9	0	35	9	0	35	9	0	3F
			3		10	0	35	10	0	35	10	0	25	10	0	2F
Ref.Tox.- cadmium	2.5 mg/L		1		9	1	15	8	1	25	8	0	15	8	0	1F
			2		10	0	35	9	1	35	9	0	25	9	0	3F
			3		10	0	35	10	0	35	9	1	15	9	0	1F
Ref.Tox.- cadmium	5 mg/L		1		10	0	25	9	1	15	7	2	15	6	1	2
			2		10	0	25	10	0	2	10	0	15	9	1	2
			3		10	0	15	8	2	15	8	0	15	7	1	2
Ref.Tox.- cadmium	10 mg/L		1		10	0	45	10	0	45	9	1	25	6	3	2
			2		10	0	45	8	2	45	7	1	15	3	4	2
			3		10	0	N	9	1	N	8	1	N	4	4	2
Ref.Tox.- cadmium	20 mg/L		1		9	1	15	5	4	N	1	4	N	0	1	2
			2		9	1	35	6	3	15	1	5	N	0	1	2
			3		10	0	15	6	4	15	1	5	N	0	1	2
Ref.Tox.- cadmium	40 mg/L		1		9	1	25	0	9	15	NA			X		
			2		10	0	25	1	9	N	0	1				
			3	✓	10	0	15	0	10	15	↓					

① WE 6/30/08 TS correct count = 10

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT: Ecology & Environment
 #S- Number on the Surface
 #M- Number of Mortality
 L-Ampic Surface
 F-Fungal Patches
 D-No Air Flow (D07)
 U-Excess food
 N-Normal
 B-No Burrows

CLIENT IDENTIFICATION	PROJECT	NEWFIELDS JOB NO. 1101-004-860	PROJECT MAN. B. Heister	NEWFIELDS LABORATORY PROTOCOL Port Gamble Bath 1, 2					SPECIES Echinostomus axelsoni																			
				ENDPOINT DATA & OBSERVATIONS																								
				DATE TECHNICIAN	DATE TECHNICIAN	DATE TECHNICIAN	DATE TECHNICIAN	DATE TECHNICIAN		DATE TECHNICIAN																		
Control /	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	18																		
	CR	CR	CR	CR	CR	MMB	TS	J	CR	IM																		
	N	N	N	N	N	N	N	N	N	IM																		
	N	N	N	N	N	N	N	N	N	IM																		
	N	N	N	N	N	N	N	N	N	N																		
RF01A /	1	129	1	120	1	115	1	16	1	108	1	91	1	23	1	126	1	74	1	78	1	165	1	2	5	104	66	169
	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162
	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20
	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29
	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139
RF02A /	1	129	1	120	1	115	1	16	1	108	1	91	1	23	1	126	1	74	1	78	1	165	1	2	5	104	66	169
	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162
	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20
	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29
	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139
RF03A /	1	129	1	120	1	115	1	16	1	108	1	91	1	23	1	126	1	74	1	78	1	165	1	2	5	104	66	169
	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162	2	162
	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3	20
	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29
	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139	5	139

2m
1m + babies
1m + babies
2m + worms + babies

DWL 7.20.08 BH

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT Ecology & Environment	PROJECT Port Angeles	NEWFIELDS JOB NO. 1101-004-060	PROJECT MAN. B. Heister	NEWFIELDS LABORATOR PROTOCOL		SPECIES Echinostoma ostriaria			
				Port Gamble Bath 1, 2	PSEP 1995				
				ENDPOINT DATA & OBSERVATIONS					
DATE	DATE	DATE	DATE	DATE	DATE	DATE	NUMBER REMAINING		
7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	
CR	CR	CR	CR	CR	MNB	TS	J	CR	
OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	
OH02A /	1	N	N	N	N	N	N	N	17
	2	N	N	IM	N	N	N	N	18
	3	N	N	N	N	N	N	N	16
	4	N	N	IS	N	N	N	N	17
	5	N	N	N	N	N	N	N	18
FT11A /	1	N	N	N	N	N	N	N	18
	2	N	N	N	N	N	N	N	19
	3	N	N	N	N	N	N	N	14
	4	IM	IM	IM	IM	IM	IM	IM	18
	5	N	N	N	N	N	N	N	20
FT08A /	1	N	N	N	N	N	N	N	19
	2	N	N	N	N	N	N	N	17
	3	N	N	N	N	N	N	N	17
	4	IS	IS	IS	IS	IS	IS	IS	20
	5	N	N	N	N	N	N	N	19
KP06A /	6	N	N	IS, IM	IS, IM	IS, IM	IS, IM	IS, IM	18
	7	N	N	N	N	N	N	N	19
	8	N	N	N	N	N	N	N	17
	9	N	N	IS	IS	IS	IS	IS	20
	10	N	N	N	N	N	N	N	20

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT Ecology & Environment	PROJECT Port Angeles	NEWFIELDS JOB NO. 1101-004-050		PROJECT MAN. B. Heider		NEWFIELDS LABORATORY PROTOCOL Port Gamble Bath 1, 2		SPECIES <i>Ecobasillus asturicus</i>	
		ENDPOINT DATA & OBSERVATIONS							
		DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
KPO5A /	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24
	CR	CR	CR	CR	CR	MMB	TS	J	CR
	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS	OBSRVNS
	N	N	N	N	N	N	N	N	N
	15 IM	3S	15 IM	N	N	N	N	N	N
BL06A /									
BL04A /									
BL03A /									

INITIAL # OF ORGANISMS
20

KS- Number on the Surface
#M- Number of Mortality
L- Anaerobic Surface
F- Fungal Patches
D- No Air Flow (DO?)
U- Excess food
N- Normal
B- No Burrows

1M
2M

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT	Ecology & Environment	PROJECT	Port Angeles		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR PROTOCOL		SPECIES	
			1101-004-880		B. Heister		PSEP 1985		Port Gamble Bath 1, 2		Eohaustorius estuarius	
INITIAL # OF ORGANISMS			ENDPOINT DATA & OBSERVATIONS									
20			DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
			TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN
			OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS	OBSERVNS
E102A /	1	11	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	
	2	180	CR	CR	CR	CR	CR	MMB	TS	F	CR	
	3	102	N	N	N	N	N	N	N	N	N	19
	4	48	N	N	N	N	N	N	N	N	N	18
	5	153	N	N	N	N	N	N	N	N	N	17
E102A /	1	196	N	N	N	N	N	N	N	N	N	18
	2	142	N	N	N	N	N	N	N	N	N	17
	3	53	N	N	N	N	N	N	N	N	N	18
	4	10	N	N	N	N	N	N	N	N	N	19
	5	98	N	N	N	N	N	N	N	N	N	19
FT01A /	1	36	N	N	N	N	N	N	N	N	N	16
	2	26	N	N	N	N	N	N	N	N	N	20
	3	146	N	N	N	N	N	N	N	N	N	18
	4	127	N	N	N	N	N	N	N	N	N	18
	5	69	N	N	N	N	N	N	N	N	N	10
FT04A /	1	99	N	N	N	N	N	N	N	N	N	19
	2	22	N	N	N	N	N	N	N	N	N	20
	3	92	N	N	N	N	N	N	N	N	N	19
	4	1	N	N	N	N	N	N	N	N	N	14
	5	18	N	N	N	N	N	N	N	N	N	19

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT	Ecology & Environment Port Angeles	NEWFIELDS JOB NO. 1101-004-060	PROJECT MAN. B. Heister	NEWFIELDS LABORATORY PROTOCOL		SPECIES <i>Exhaustibolus sativarius</i>							
				Port Gamble Bath 1, 2									
				PSP 1995									
ENDPOINT DATA & OBSERVATIONS													
IE09A /	INITIAL # OF ORGANISMS	20	DATE	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	NUMBER REMAINING
	REP	1	TECHNICIAN	CR	CR	CR	CR	CR	MMB	T	T	CR	19
	REP	2	OBSERVATIONS	N	N	1S	1S	1S	N	A	N	N	18
	REP	3	TECHNICIAN	↓	2S	1S	1S	1S	2S	N	N	↓	20
	REP	4	OBSERVATIONS	↓	3S	N	N	N	N	A	N	↓	18
IH01A /	REP	1	TECHNICIAN	↓	4S	3S	2S	2S	N	2S	1S	1S	20
	REP	2	OBSERVATIONS	8S	8S	2S	1S	1S	1S	1S	2S	1S	20
	REP	3	TECHNICIAN	5S	6S	5S	4S	4S	5S	2S	1S	1S	20
	REP	4	OBSERVATIONS	9S	10S	4S	2S	2S	N	N	1M	1S, 1M	20
	REP	5	TECHNICIAN	7S	6S	3S	1S	2S	2S	2S	N	1S	20
IH02A /	REP	1	TECHNICIAN	9S	6S	2S	1S	N	N	1S	1S	1S	20
	REP	2	OBSERVATIONS	N	2S	N	1S	N	N	N	1S	N	15
	REP	3	TECHNICIAN	↓	N	N	N	↓	1S	N	N	↓	16
	REP	4	OBSERVATIONS	↓	2S	1S	1M	1M	N	N	3S	↓	19
	REP	5	TECHNICIAN	↓	N	N	N	N	N	N	N	↓	16
IH03A /	REP	1	TECHNICIAN	↓	3S	↓	1S	1S	1S	1S	1S	↓	20
	REP	2	OBSERVATIONS	4S	8M	16M	15M	15M	16M	16M	15M	16M	19
	REP	3	TECHNICIAN	9S	N	N	N	N	N	N	N	↓	20
	REP	4	OBSERVATIONS	N	N	N	N	1S	16M	N	N	↓	19
	REP	5	TECHNICIAN	↓	3S	8M	16M	15M	15M	16M	16M	16M	20
IH05A /	REP	1	TECHNICIAN	3S, 1M	4S	5M	4M, F	4M, F	1M, F	F	↓	F	12
	REP	2	OBSERVATIONS	4S	5S	5M	16M	16M	16M	16M	15M	17M, F	0
	REP	3	TECHNICIAN	4S	5S	N	2S	1S	1S	1.5	1.5	↓	20
	REP	4	OBSERVATIONS	N	N	N	N	N	N	N	N	↓	0
	REP	5	TECHNICIAN	↓	3S	3S	1S	1S	N	N	↓	1S	18

1M

worm

big worm

Surrogate: 0

strong sulfide odor

" "

strong sulfide odor

18 Surv

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT Ecology & Environment	PROJECT Port Angeles	NEWFIELDS JOB NO. 1101-004-860	PROJECT MAN B. Heiser	NEWFIELDS LABORATORY PROTOCOL Port Gemble Bath 1, 2					SPECIES Echaerastrius azyrius	
				DATE	TECHNICIAN	OBSERVNS	DATE	TECHNICIAN		OBSERVNS
IH06A I.	7116	7117	7118	7119	7100	7121	7122	7123	7124	
	CR	CR	CR	CR	CR	MMS	TS	J	CR	
	OB	OB	OB	OB	OB	OB	OB	OB	OB	
	N	N	N	N	N	N	N	N	N	
	4S	N	N	N	N	N	N	N	N	
KP01A I.	3S	1M	1M	1S	4S	1S	1S	1S	1S	
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	1S	N	N	N	N	
	3S	3S	3S	4S	2S	3S, 3M	N	1m	1M	
	N	N	N	N	N	N	N	N	N	
KP02A I.	1M	1M	1S	1S	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	
KP03A I.	157	72	88	107	62					
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	
	N	N	N	N	N	N	N	N	N	

OK
Surr: 19
ZM
Surr: 18
1m

Q Strong Swifide Small



CLIENT Ecology & Environment	PROJECT Port Angeles	NEWFIELDS JOB NO. 1101-004-060	PROJECT MAN. B. Heister	NEWFIELDS LABORATORY PROTOCOL Port Gamble Bath 1, 2					SPECIES Exhaustionis estuarius										
				ENDPOINT DATA & OBSERVATIONS															
				DATE TECHNICIAN	DATE TECHNICIAN	DATE TECHNICIAN	DATE TECHNICIAN	DATE TECHNICIAN											
MAD01A /	7/16	CR	7/17	CR	7/18	CR	7/19	CR	7/20	MMB	7/21	TS	7/22	TS	7/23	TS	7/24	CR	19
	N	N	1S	N	N	N	1S, F	N	N	N	N	N	N	N	N	N	N	N	19
	N	N	19M	N	18M	N	19M	N	N	N	19M	N	19M	N	16M	N	9PM	N	0
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	17
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
BL01A /	N	N	1S	N	1S, F	N	1S, F	N	N	N	N	N	N	N	N	N	N	N	18
	N	N	4M, F	N	2M, F	N	1M, F	N	N	N	N	N	N	N	N	N	N	N	17
	N	N	2M	N	2S, F	N	2S, F	N	N	N	N	N	N	N	N	N	N	N	15
	N	N	4S	N	2S, F	N	2S, F	N	N	N	N	N	N	N	N	N	N	N	19
	N	N	3S	N	1S, F	N	1S, F	N	N	N	N	N	N	N	N	N	N	N	19
CO02A /	N	N	1S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
DO03A /	2S	N	3S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	15
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	18
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	37
	1S	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	18

Surv = 18
1m

① WC, MMB 7/21/08
① bacterial growth CR 7/24

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATORY PROTOCOL		SPECIES																					
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gambel Bath 1, 2		Echinostomus axanthicus																					
ENDPOINT DATA & OBSERVATIONS																															
REP	INITIAL Z OF ORGANSIMS	DATE	TECHNICIAN	OBSRVNS	DATE	TECHNICIAN	OBSRVNS	DATE	TECHNICIAN	OBSRVNS	DATE	TECHNICIAN	OBSRVNS	NUMBER REMAINING																	
															DATE	TECHNICIAN	OBSRVNS	DATE	TECHNICIAN	OBSRVNS											
1	20	7/16	CR	N	7/17	CR	N	7/18	CR	N	7/19	CR	N	7/20	CR	N	7/21	MMS	N	7/22	TS	N	7/23	J	N	7/24	CR	N	14		
2				N			N			N			N			N															18
3				N			N			IM				15, IM																	20
4				N			15			N				15																	20
5				N			N			N				N																	18

IM



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh	NewFields Test ID: 1101-004-860	Test Duration (days): 10
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PRETEST INITIAL / FINAL / OTHER (circle one) DAY of TEST: Ø
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:	
15 July '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
Control	Surr.	15 Jul '08, MMB	20.5	18.5	15 Jul '08, MMB	N			
RF01A	Surr.		20.5						
RF02A	Surr.		0.624						
RF03A	Surr.		1.70						
OH02A	Surr.		0.727						
FT11A	Surr.		0.797						
FT06A	Surr.		1.31						
KP06A	Surr.		0.586						
KP05A	Surr.		1.32						
BL06A	Surr.		0.763						
BL04A	Surr.		20.5						
BL03A	Surr.		1.08						
BL02A	Surr.		0.708						
EI02A	Surr.		20.5						
FT01A	Surr.		20.5						
FT04A	Surr.		0.596						

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
IE09A	Surr.	15 Jul '08, MMB	<0.5	18.5	15 Jul '08, MMB	N			
IH01A	Surr.		<0.5						
IH02A	Surr.		<0.5						
IH03A	Surr.		0.562						
IH05A	Surr.		0.958						
IH06A	Surr.		0.958						
KP01A	Surr.		1.000						
KP02A	Surr.		<0.5						
KP03A	Surr.		0.674						
MA01A	Surr.		0.905						
BL01A	Surr.		<0.5						
CO02A	Surr.		0.819						
DO03A	Surr.		6.991						
DO04A	Surr.	↓	0.588	↓	↓	↓			



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh	NewFields Test ID: 1101-004-860	Test Duration (days): 10
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PRETEST INITIAL / FINAL / OTHER (circle one) DAY of TEST: 7/10
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:	

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.	TS 7/15/08			7/15/08 TS	N	NA		0.008
RF01A	Surr.	↓			↓	↓	↓		0.007
RF02A	Surr.		0.016						
RF03A	Surr.		0.026						
OH02A	Surr.		0.049						
FT11A	Surr.		0.038						
FT06A	Surr.		0.018						
KP06A	Surr.		0.023						
KP05A	Surr.		0.014						
BL06A	Surr.		0.043						
BL04A	Surr.		0.014						
BL03A	Surr.		0.218						
BL02A	Surr.		0.015						
EI02A	Surr.		0.011						
FT01A	Surr.		0.007						
FT04A	Surr.		0.008						

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			
IE09A	Surr.	TS 7/15/08			TS 7/15/08	N	NA →		0.018			
IH01A	Surr.	↓			↓	↓	↓		0.011			
IH02A	Surr.		0.020									
IH03A	Surr.		0.011									
IH05A	Surr.		0.007									
IH06A	Surr.		0.014									
KP01A	Surr.		0.009									
KP02A	Surr.		0.021									
KP03A	Surr.		0.098									
MA01A	Surr.		0.575									
BL01A	Surr.		0.033									
CO02A	Surr.		0.019									
DO03A	Surr.		0.028									
DO04A	Surr.		↓					↓		↓		0.035



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh	NewFields Test ID: 1101-004-860	Test Duration (days): 10
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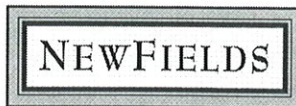
PRETEST (INITIAL) / FINAL / OTHER (circle one) DAY of TEST: 1
OVERLYING (OV) / (FOREWATER (PW)) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
16 July '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
Control	Surr.	16 Jul. '08, MMB	20.5	20.0	16 Jul. '08, MMB	N	6.7	29	0.039
RF01A	Surr.		0.00				6.7	27	0.109
RF02A	Surr.		1.66				6.9	27	0.133
RF03A	Surr.		3.92				6.9	28	0.204
OH02A	Surr.		1.50				7.1	29	0.311
FT11A	Surr.		1.68				7.1	29	0.302
FT06A	Surr.		4.17				7.2	28	0.233
KP06A	Surr.		1.27				7.3	28	0.219
KP05A	Surr.		2.46				7.3	28	0.200
BL06A	Surr.		3.31				7.3	28	0.142
BL04A	Surr.		2.08				7.7	29	0.376
BL03A	Surr.		3.00				7.6	28	0.192
BL02A	Surr.		1.63				7.5	28	0.277
EI02A	Surr.		1.66				7.5	28	0.168
FT01A	Surr.		6.789				7.5	28	0.212
FT04A	Surr.	↓	3.05	↓	↓	↓	7.4	28	0.139

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
IE09A	Surr.	16 Jul. '08, MMB	20.5	20.0	16 Jul. '08, MMB	N	7.2	29	0.274
IH01A	Surr.		0.00				7.1	29	0.534
IH02A	Surr.		20.5				7.1	28	0.274
IH03A	Surr.		1.47				7.1	28	0.592
IH05A	Surr.		2.65				7.1	28	0.489
IH06A	Surr.		2.54				7.2	28	0.173
KP01A	Surr.		2.52				7.1	28	0.277
KP02A	Surr.		1.94				7.2	28	0.298
KP03A	Surr.		1.91				7.2	29	0.310
MA01A	Surr.		5.68				7.3	29	^{MMB} 0.135 ①
BL01A	Surr.		0.673				7.4	30	0.627
CO02A	Surr.		2.60				7.5	30	0.342
DO03A	Surr.		2.01				7.5	29	0.334
DO04A	Surr.	↓	2.59	↓	↓	↓	7.4	30	0.378

① Diluted sample by 1/2; ~~12.5 ml~~ ^{12.5 ml} sample + 12.5 ml DI H₂O = 0.675 $\frac{mg}{L}$ · 2 = 1.35 $\frac{mg}{L}$



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh, Batch 2	NewFields Test ID: 1101-004-860	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:	
7/27/08	19.5	

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.	7/25/08 BH	0.180	19.0	7/28/08 TS	Y	NA →		0.002
RF01A	Surr.	↓	0.05 20.5 @	↓	↓		↓		∅
RF02A	Surr.		0.05 20.5 @						0.001
RF03A	Surr.		2.37						0.018
OH02A	Surr.		2.11						0.002
FT11A	Surr.		0.311						0.004
FT06A	Surr.		0.172						0.002
KP06A	Surr.		0.134						0.002
KP05A	Surr.		2.29						0.003
BL06A	Surr.		0.212						0.002
BL04A	Surr.		0.141						0.003
BL03A	Surr.		2.60						0.002
BL02A	Surr.		0.726						0.006
EI02A	Surr.		.						.
FT01A	Surr.		0.624						0.003
FT04A	Surr.		2.04						0.004

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
IE09A	Surr.	7/25/08 BH	0.649	19.0	7/28/08 TS	Y	NA →		0.004
IH01A	Surr.	↓	0.234	↓	↓	↓	↓	↓	0.001
IH02A	Surr.		0.224						0.003
IH03A	Surr.		1.44						0.002
IH05A	Surr.		2.54						0.003
IH06A	Surr.		1.81						0.002
KP01A	Surr.		1.88						0.002
KP02A	Surr.		1.58						0.006
KP03A	Surr.		1.43						0.002
MA01A	Surr.		.						.
BL01A	Surr.		1.06						0.003
CO02A	Surr.		1.55						0.007
DO03A	Surr.		0.176						0.013
DO04A	Surr.		0.896						0.004



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh, Batch 2	NewFields Test ID: 1101-004-860	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:	
7/29/08	19.5	

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.	7/29/08 CR	<0.5	19.2	7/29/08 CR	N	7.2	28	0.037
RF01A	Surr.	↓	<0.5	19.0	↓	↓	7.4	26	0.136
RF02A	Surr.		<0.5	18.9			7.4	26	0.206
RF03A	Surr.		4.33	19.2			7.3	28	0.124
OH02A	Surr.		2.41	19.6			7.5	28	0.301
FT11A	Surr.		<0.5	19.7			7.5	28	0.281
FT06A	Surr.		<0.5	19.5			7.9	26	0.200
KP06A	Surr.		<0.5	19.5			7.4	27	0.176
KP05A	Surr.		1.83	19.7			7.6	26	0.106
BL06A	Surr.		<0.5	19.8			7.5	27	0.243
BL04A	Surr.		0.558	19.2			7.1	27	0.212
BL03A	Surr.		2.82	19.7			7.6	26	0.105
BL02A	Surr.		<0.5	19.5			7.3	27	0.272
EI02A	Surr.								
FT01A	Surr.		<0.5	19.5			7.4	27	0.190
FT04A	Surr.		1.92	19.4			7.4	27	0.127

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		
IE09A	Surr.	7/29/08 LR	<0.5	19.6	7/29/08 CR	N	7.2	27	0.053		
IH01A	Surr.	↓	<0.5	19.6	↓	↓	7.4	27	0.190		
IH02A	Surr.		<0.5	19.3			7.3	27	0.282		
IH03A	Surr.										
IH05A	Surr.										
IH06A	Surr.										
KP01A	Surr.										
KP02A	Surr.			0.971			19.6		7.5	27	0.083
KP03A	Surr.			0.988			19.4		7.2	27	0.190
MA01A	Surr.										
BL01A	Surr.			1.10			19.2		7.3	28	0.288
CO02A	Surr.		0.852	19.0		7.4	28	0.153			
DO03A	Surr.										
DO04A	Surr.	↓	<0.5	19.2	↓	↓	7.6	30	0.207		

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/ END TIME 10:30, 08:30	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				D.O.		TEMP		SALINITY		pH			
				meter	mg/L	meter	°C	meter	ppt	meter	unit		
Control /	0	Surr	44	4	8.1	4	14.7	R	28	S	7.7	CR	7/15/08
Control /	1	Surr	44	4	9.0	4	15.4	R	29	S	8.0	CR	7/16/08
Control /	2	Surr	44	4	8.8.4	4	15.8	R	28	S	7.8	CR	7/17/08
Control /	3	Surr	44	4	8.4	4	15.4	R	30	S	8.0	MMS	7/18/08
Control /	4	Surr	44	4	8.2	4	16.0	R	29	S	7.7	CR	7/19/08
Control /	5	Surr	44	4	8.5	4	15.4	R	28	S	8.2	CR	7/20/08
Control /	6	Surr	44	4	8.3	4	15.8	R	29	S	8.0	MMS	7/21/08
Control /	7	Surr	44	4	8.4	4	15.4	R	29	S	8.2	B	7/22/08
Control /	8	Surr	44	4	8.6	4	15.4	R	29	S	8.1	J	7/23/08
Control /	9	Surr	44	4	8.6	4	15.4	R	29	S	8.1	CR	7/24/08
Control /	10	Surr	44	4	8.4	4	15.4	R	29	1	8.0	BH	7/25/08
RF01A /	0	Surr	47	4	8.4	4	15.4	R	27	S	7.8	CR	7/15/08
RF01A /	1	Surr	47	4	9.0	4	15.3	R	27	S	8.0	CR	7/16/08
RF01A /	2	Surr	47	4	8.6	4	15.1	R	27	S	7.9	CR	7/17/08
RF01A /	3	Surr	47	4	8.4	4	15.7	R	29	S	8.1	MMS	7/18/08
RF01A /	4	Surr	47	4	8.3	4	15.9	R	28	S	7.8	CR	7/19/08
RF01A /	5	Surr	47	4	8.5	4	15.3	R	28	S	8.2	CR	7/20/08
RF01A /	6	Surr	47	4	8.1	4	15.8	R	28	S	8.1	MMS	7/21/08
RF01A /	7	Surr	47	4	8.4	4	15.4	R	28	S	8.2	B	7/22/08
RF01A /	8	Surr	47	4	8.6	4	15.7	R	27	S	8.1	J	7/23/08
RF01A /	9	Surr	47	4	8.7	4	15.4	R	27	S	8.1	CR	7/24/08
RF01A /	10	Surr	47	4	8.4	4	15.4	R	27	1	8.0	BH	7/25/08

035 CR 7/17 @ 15 7:25:09 BH

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		TEMP		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	°C	meter	ppt	meter	pH		
RF02A/	0	Surr	63	4	8.3	4	15.5	R	27	5	7.8	CR	7/15/08
RF02A/	1	Surr	63	4	8.9	4	15.6	R	27	5	8.0	CR	7/16/08
RF02A/	2	Surr	63	4	8.5	4	15.5	R	27	5	8.1	CR	7/17/08
RF02A/	3	Surr	63	4	8.2	4	16.2	R	30	5	7.9	MMMB	7/18/08
RF02A/	4	Surr	63	4	8.3	4	15.7	R	29	5	7.8	CR	7/19/08
RF02A/	5	Surr	63	4	8.6	4	15.1	R	28	5	8.2	CR	7/20/08
RF02A/	6	Surr	63	4	8.2	4	16.1	R	28	5	8.0	MMMB	7/21/08
RF02A/	7	Surr	63	4	8.4	4	15.6	R	28	5	8.2	TS	7/22/08
RF02A/	8	Surr	63	4	8.4	4	15.6	R	28	5	8.1	J	7/23/08
RF02A/	9	Surr	63	4	8.6	4	15.3	R	28	5	8.1	CR	7/24/08
RF02A/	10	Surr	63	4	8.5	4	14.6	I	27	1	8.0	BH	7/25/08
RF03A/	0	Surr	31	4	8.0	4	15.3	R	27	5	7.8	CR	7/15/08
RF03A/	1	Surr	31	4	8.9	4	15.4	R	29	5	7.8	CR	7/16/08
RF03A/	2	Surr	31	4	8.5	4	15.4	R	28	5	7.9	CR	7/17/08
RF03A/	3	Surr	31	4	8.1	4	15.8	R	30	5	7.9	MMMB	7/18/08
RF03A/	4	Surr	31	4	8.2	4	15.7	R	29	5	7.8	CR	7/19/08
RF03A/	5	Surr	31	4	8.3	4	15.5	R	29	5	8.1	CR	7/20/08
RF03A/	6	Surr	31	4	8.2	4	16.0	R	30	5	8.1	MMMB	7/21/08
RF03A/	7	Surr	31	4	8.4	4	15.4	R	30	5	8.2	TS	7/22/08
RF03A/	8	Surr	31	4	8.4	4	15.5	R	29	5	7.9	J	7/23/08
RF03A/	9	Surr	31	4	8.6	4	15.5	R	29	5	8.0	CR	7/24/08
RF03A/	10	Surr	31	4	8.3	4	15.5	I	29	1	8.2	BH	7/25/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarinus
NEWFIELDS JOB NUMBER	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
OH02A/	0	Surr	75	4	8.2	4	15.5	R	29	S	7.8	CR	7/15/08
OH02A/	1	Surr	75	4	8.5	4	15.7	R	30	S	8.0	CR	7/16/08
OH02A/	2	Surr	75	4	8.2	4	15.6	R	29	S	8.0	CR	7/17/08
OH02A/	3	Surr	75	4	8.2	4	16.1	R	80	S	8.1	MMMB	7/18/08
OH02A/	4	Surr	75	4	8.3	4	15.9	R	30	S	8.0	CR	7/19/08
OH02A/	5	Surr	75	4	8.4	4	15.9	R	29	S	8.3	CR	7/20/08
OH02A/	6	Surr	75	4	8.2	4	16.2	R	30	S	8.0	MMMB	7/21/08
OH02A/	7	Surr	75	4	8.3	4	15.9	R	30	S	8.2	P	7/22/08
OH02A/	8	Surr	75	4	8.6	4	15.9	R	29	S	8.1	J	7/23/08
OH02A/	9	Surr	75	4	8.0	4	15.5	R	29	S	8.1	CR	7/24/08
OH02A/	10	Surr	75	4	7.7	4	16.2	I	29	I	8.1	BH	7/25/08
FT11A/	0	Surr	51	4	8.7.6	4	15.6	R	28	S	8.0	CR	7/15/08
FT11A/	1	Surr	51	4	9.0	4	15.5	R	29	S	8.0	CR	7/16/08
FT11A/	2	Surr	51	4	8.7	4	14.8	R	28	S	8.0	CR	7/17/08
FT11A/	3	Surr	51	4	8.3	4	15.8	R	30	S	8.0	MMMB	7/18/08
FT11A/	4	Surr	51	4	8.4	4	15.8	R	30	S	7.9	CR	7/19/08
FT11A/	5	Surr	51	4	8.5	4	15.3	R	29	S	8.2	CR	7/20/08
FT11A/	6	Surr	51	4	8.3	4	16.0	R	80	S	8.0	MMMB	7/21/08
FT11A/	7	Surr	51	4	8.4	4	15.5	R	30	S	8.2	P	7/22/08
FT11A/	8	Surr	51	4	8.4	4	15.6	R	29	S	8.1	J	7/23/08
FT11A/	9	Surr	51	4	8.4	4	15.4	R	29	S	8.0	CR	7/24/08
FT11A/	10	Surr	51	4	8.2	4	15.4	I	29	I	8.1	BH	7/25/08

OWC CR 7/15/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	> 5.0	meter	°C	meter	ppt	meter	unit		
FT06A/	0	Surr	82	4	8.4	4	15.9	R	28	S	8.0	CR	7/15/08
FT06A/	1	Surr	82	4	8.7	4	15.9	R	28	S	7.9	CR	7/16/08
FT06A/	2	Surr	82	4	8.5	4	15.6	R	28	S	8.1	CR	7/17/08
FT06A/	3	Surr	82	4	8.2	4	15.8	R	29	S	8.0	MMMB	7/18/08
FT06A/	4	Surr	82	4	8.1	4	15.9	R	29	S	8.1	CR	7/19/08
FT06A/	5	Surr	82	4	8.4	4	15.7	R	28	S	8.3	CR	7/20/08
FT06A/	6	Surr	82	4	8.3	4	16.0	R	28	S	8.1	MMMB	7/21/08
FT06A/	7	Surr	82	4	8.3	4	15.7	R	28	S	8.2	B	7/22/08
FT06A/	8	Surr	82	4	8.5	4	15.5	R	29	S	8.1	L	7/23/08
FT06A/	9	Surr	82	4	8.5	4	15.4	R	28	S	8.1	CR	7/24/08
FT06A/	10	Surr	82	4	8.9	4	15.0	R	27	1	8.1	BH	7/25/08
KP06A/	0	Surr	176	4	8.5	4	15.6	R	28	S	8.0	CR	7/15/08
KP06A/	1	Surr	176	4	9.0	4	15.3	R	28	S	8.0	CR	7/16/08
KP06A/	2	Surr	176	4	8.6	4	15.3	R	28	S	8.0	CR	7/17/08
KP06A/	3	Surr	176	4	8.4	4	15.3	R	28	S	7.9	MMMB	7/18/08
KP06A/	4	Surr	176	4	8.3	4	15.8	R	28	S	8.1	CR	7/19/08
KP06A/	5	Surr	176	4	8.5	4	15.3	R	28	S	8.2	CR	7/20/08
KP06A/	6	Surr	176	4	8.3	4	15.9	R	29	S	8.1	MMMB	7/21/08
KP06A/	7	Surr	176	4	8.3	4	15.3	R	29	S	8.0	B	7/22/08
KP06A/	8	Surr	176	4	8.5	4	15.4	R	28	S	8.2	L	7/23/08
KP06A/	9	Surr	176	4	8.6	4	15.3	R	29	S	8.1	CR	7/24/08
KP06A/	10	Surr	176	4	8.3	4	15.2	1	28	1	8.1	BH	7/25/08

0 IE 7.25.08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Date
				D.O.		TEMP		SALINITY		pH			
				meter	mg/L	meter	°C	meter	ppt	meter	unit		
KP05A/	0	Surr	27	4	8.5	4	15.1	R	28	5	7.9	CR	7/15/08
KP05A/	1	Surr	27	4	8.8	4	15.6	R	28	5	7.8	CR	7/16/08
KP05A/	2	Surr	27	4	8.6	4	15.2	R	28	5	8.0	CR	7/17/08
KP05A/	3	Surr	27	4	8.1	4	16.1	R	30	5	8.0	MNMB	7/18/08
KP05A/	4	Surr	27	4	8.3	4	15.9	R	29	5	8.0	CR	7/19/08
KP05A/	5	Surr	27	4	8.3	4	15.5	R	28	5	8.1	CR	7/20/08
KP05A/	6	Surr	27	4	8.0	4	16.0	R	29	5	8.0	MNMB	7/21/08
KP05A/	7	Surr	27	4	8.4	4	15.5	R	29	5	8.3	T	7/22/08
KP05A/	8	Surr	27	4	8.4	4	15.4	R	28	5	7.9	T	7/23/08
KP05A/	9	Surr	27	4	8.5	4	15.5	R	28	5	7.9	CR	7/24/08
KP05A/	10	Surr	27	4	8.2	4	15.6	I	28	1	8.2	BH	7/25/08
BL06A/	0	Surr	175	4	8.5	4	15.5	R	28	5	8.0	CR	7/15/08
BL06A/	1	Surr	175	4	8.9	4	15.4	R	28	5	7.9	CR	7/16/08
BL06A/	2	Surr	175	4	8.6	4	15.3	R	28	5	7.9	CR	7/17/08
BL06A/	3	Surr	175	4	8.4	4	15.3	R	28	5	7.9	MNMB	7/18/08
BL06A/	4	Surr	175	4	8.3	4	15.8	R	28	5	8.1	CR	7/19/08
BL06A/	5	Surr	175	4	8.4	4	15.4	R	28	5	8.2	CR	7/20/08
BL06A/	6	Surr	175	4	8.5 ⁰ _{8.1}	4	15.3 ⁰ _{16.0}	R	30	5	8.1	MNMB	7/21/08
BL06A/	7	Surr	175	4	8.2	4	15.3	R	29	5	8.0	T	7/22/08
BL06A/	8	Surr	175	4	8.3	4	15.4	R	28	5	8.3	T	7/23/08
BL06A/	9	Surr	175	4	8.4	4	15.4	R	29	5	8.2	CR	7/24/08
BL06A/	10	Surr	175	4	8.1	4	15.3	I	28	1	8.1	BH	7/25/08

OWP CR 7/20



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOBOR#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				> 5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	°C	meter	ppt	meter	pH		
BL04A/	0	Surr	149	4	8.2	4	15.7	R	28	S	8.0	CR	7/15/08
BL04A/	1	Surr	149	4	8.9	4	15.6	R	28	S	8.0	CR	7/16/08
BL04A/	2	Surr	149	4	8.3	4	15.3	R	28	S	7.98.1 ^P	CR	7/17/08
BL04A/	3	Surr	149	4	8.3	4	15.9	R	29	S	8.1	MMMB	7/18/08
BL04A/	4	Surr	149	4	8.2	4	15.7	R	29	S	8.1	CR	7/19/08
BL04A/	5	Surr	149	4	8.3	4	15.5	R	28	S	8.3	CR	7/20/08
BL04A/	6	Surr	149	4	8.3	4	15.5	R	29	S	8.0	MMMB	7/21/08
BL04A/	7	Surr	149	4	8.3	4	15.4	R	29	S	8.3	F	7/22/08
BL04A/	8	Surr	149	4	8.4	4	15.5	R	28	S	8.4	CR	7/23/08
BL04A/	9	Surr	149	4	8.6	4	15.4	R	28	S	8.4	CR	7/24/08
BL04A/	10	Surr	149	4	8.2	4	15.4	R	28	S	8.7	BH	7/25/08
BL03A/	0	Surr	151	4	8.2	4	15.8	R	28	S	8.1	CR	7/15/08
BL03A/	1	Surr	151	4	8.7	4	15.4	R	28	S	8.1	CR	7/16/08
BL03A/	2	Surr	151	4	8.3	4	15.3	R	28	S	7.9	CR	7/17/08
BL03A/	3	Surr	151	4	8.3	4	15.6	R	29	S	8.1	MMMB	7/18/08
BL03A/	4	Surr	151	4	7.9	4	15.9	R	29	S	8.2	CR	7/19/08
BL03A/	5	Surr	151	4	7.8	4	15.5	R	28	S	8.3	CR	7/20/08
BL03A/	6	Surr	151	4	7.9	4	16.0	R	29	S	8.3	MMMB	7/21/08
BL03A/	7	Surr	151	4	8.1	4	15.4	R	29	S	8.4	F	7/22/08
BL03A/	8	Surr	151	4	8.2	4	15.6	R	28	S	8.4	F	7/23/08
BL03A/	9	Surr	151	4	8.4	4	15.9	R	29	S	8.3	CR	7/24/08
BL03A/	10	Surr	151	4	7.8	4	15.4	R	28	S	8.3	BH	7/25/08

DWC CR 7/17/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarinus</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOBOR#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
BL02A/	0	Surr	159	4	8.1	4	15.8	R	28	S	8.0	CR	7/15/08
BL02A/	1	Surr	159	4	8.8	4	15.2	R	29	S	7.9	CR	7/16/08
BL02A/	2	Surr	159	4	8.3	4	15.4	R	28	S	7.9	CR	7/17/08
BL02A/	3	Surr	159	4	8.6	4	15.5	R	28	S	7.9	MNMB	7/18/08
BL02A/	4	Surr	159	4	7.9	4	15.9	R	28	S	8.3	CR	7/19/08
BL02A/	5	Surr	159	4	7.8	4	15.4	R	28	S	8.5	CR	7/20/08
BL02A/	6	Surr	159	4	7.8	4	16.9	R	28	S	8.6	MNMB	7/21/08
BL02A/	7	Surr	159	4	8.0	4	15.3	R	28	S	8.6	D	7/22/08
BL02A/	8	Surr	159	4	8.0	4	15.4	R	28	S	8.4	V	7/23/08
BL02A/	9	Surr	159	4	8.1	4	15.5	R	29	S	8.6	CR	7/24/08
BL02A/	10	Surr	159	4	7.9	4	15.4	R	27	I	8.7	BH	7/25/08
EI02A/	0	Surr	56	4	8.5	4	15.6	R	27	S	7.9	CR	7/15/08
EI02A/	1	Surr	56	4	9.0	4	15.5	R	27	S	8.1	CR	7/16/08
EI02A/	2	Surr	56	4	8.6	4	15.3	R	27	S	8.0	CR	7/17/08
EI02A/	3	Surr	56	4	8.3	4	16.2	R	30	S	7.9	MNMB	7/18/08
EI02A/	4	Surr	56										
EI02A/	5	Surr	56										
EI02A/	6	Surr	56										
EI02A/	7	Surr	56										
EI02A/	8	Surr	56										
EI02A/	9	Surr	56										
EI02A/	10	Surr	56										



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR/HOB#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				> 5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	mg/L	meter	°C	meter	ppt	meter	unit		
FT01A/	0	Surr	144	4	8.3	4	15.7	R	28	S	8.0	CR	7/15/08
FT01A/	1	Surr	144	4	8.8	4	15.6	R	28	S	8.0	CR	7/16/08
FT01A/	2	Surr	144	4	8.4	4	15.4	R	28	S	8.1	CR	7/17/08
FT01A/	3	Surr	144	4	8.2	4	15.8	R	30	S	7.9	NMB	7/18/08
FT01A/	4	Surr	144	4	8.1	4	15.7	R	29	S	8.0	CR	7/19/08
FT01A/	5	Surr	144	4	8.4	4	15.4	R	28	S	8.2	CR	7/20/08
FT01A/	6	Surr	144	4	8.2	4	16.0	R	28	S	8.1	NMB	7/21/08
FT01A/	7	Surr	144	4	8.3	4	15.4	R	28	S	8.3	T	7/22/08
FT01A/	8	Surr	144	4	8.4	4	15.5	R	29	S	8.4	J	7/23/08
FT01A/	9	Surr	144	4	8.6	4	15.3	R	29	S	8.4	CR	7/24/08
FT01A/	10	Surr	144	4	8.5	4	14.7	I	28	I	8.4	BH	7/25/08
FT04A/	0	Surr	6	4	8.4	4	15.4	R	27	S	7.9	CR	7/15/08
FT04A/	1	Surr	6	4	8.7	4	15.9	R	28	S	7.8	CR	7/16/08
FT04A/	2	Surr	6	4	8.4	4	15.6	R	27	S	7.9	CR	7/17/08
FT04A/	3	Surr	6	4	8.2	4	15.9	R	29	S	7.9	NMB	7/18/08
FT04A/	4	Surr	6	4	8.2	4	15.8	R	29	S	7.9	CR	7/19/08
FT04A/	5	Surr	6	4	8.1	4	15.8	R	28	S	7.8	CR	7/20/08
FT04A/	6	Surr	6	4	8.2	4	16.0	R	28	S	8.0	NMB	7/21/08
FT04A/	7	Surr	6	4	8.3	4	15.4	R	28	S	8.4	T	7/22/08
FT04A/	8	Surr	6	4	8.3	4	15.7	R	28	S	7.8	J	7/23/08
FT04A/	9	Surr	6	4	8.4	4	15.7	R	28	S	7.9	CR	7/24/08
FT04A/	10	Surr	6	4	8.2	4	15.5	I	27	I	8.2	BH	7/25/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOBOR#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
IE09A/	0	Surr	71	4	8.1	4	15.7	R	28	5	7.9	CR	7/15/08
IE09A/	1	Surr	71	4	8.9	4	15.5	R	28	5	8.0	CR	7/16/08
IE09A/	2	Surr	71	4	8.7	4	14.7	R	27	5	8.0	CR	7/17/08
IE09A/	3	Surr	71	4	8.2	4	15.9	R	30	5	8.1	MMB	7/18/08
IE09A/	4	Surr	71	4	8.2	4	15.9	R	29	5	8.3	CR	7/19/08
IE09A/	5	Surr	71	4	8.9	4	15.6	R	28	5	8.3	CR	7/20/08
IE09A/	6	Surr	71	4	8.3	4	15.9	R	29	5	8.1	MMB	7/21/08
IE09A/	7	Surr	71	4	8.4	4	15.5	R	29	5	8.2	TS	7/22/08
IE09A/	8	Surr	71	4	8.6	4	15.3	R	29	5	8.1	J	7/23/08
IE09A/	9	Surr	71	4	8.6	4	15.4	R	28	5	8.1	CR	7/24/08
IE09A/	10	Surr	71	4	8.5	4	14.9	R	28	1	8.2	BH	7/25/08
IH01A/	0	Surr	64	4	8.3	4	15.6	R	27	5	7.9	CR	7/15/08
IH01A/	1	Surr	64	4	8.9	4	15.5	R	27	5	8.0	CR	7/16/08
IH01A/	2	Surr	64	4	8.7	4	14.7	R	27	5	8.0	CR	7/17/08
IH01A/	3	Surr	64	4	8.3	4	15.9	R	30	5	8.0	MMB	7/18/08
IH01A/	4	Surr	64	4	8.1	4	15.9	R	29	5	8.1	CR	7/19/08
IH01A/	5	Surr	64	4	8.4	4	15.6	R	28	5	8.2	CR	7/20/08
IH01A/	6	Surr	64	4	8.2	4	16.1	R	29	5	8.0	MMB	7/21/08
IH01A/	7	Surr	64	4	8.4	4	15.5	R	29	5	8.2	TS	7/22/08
IH01A/	8	Surr	64	4	8.5	4	15.5	R	28	5	8.1	J	7/23/08
IH01A/	9	Surr	64	4	8.5	4	15.5	R	28	5	8.0	CR	7/24/08
IH01A/	10	Surr	64	4	8.2	4	15.6	R	28	1	8.1	BH	7/25/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECD./HOB#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	°C	meter	ppt	meter	pH		
IH02A/	0	Surr	166	4	8.3	4	15.6	R	28	5	8.1	CR	7/15/08
IH02A/	1	Surr	166	4	8.9	4	15.2	R	28	5	7.9	CR	7/16/08
IH02A/	2	Surr	166	4	8.4	4	15.3	R	28	5	7.9	CR	7/17/08
IH02A/	3	Surr	166	4	8.2	4	15.3	R	28	5	8.0	MMS	7/18/08
IH02A/	4	Surr	166	4	8.1	4	15.4	R	28	5	8.0	CR	7/19/08
IH02A/	5	Surr	166	4	8.4	4	15.4	R	28	5	8.2	CR	7/20/08
IH02A/	6	Surr	166	4	8.1	4	15.9	R	29	5	8.2	MMS	7/21/08
IH02A/	7	Surr	166	4	8.4	4	15.3	R	28	5	8.0	B	7/22/08
IH02A/	8	Surr	166	4	8.5	4	15.4	R	28	5	8.2	J	7/23/08
IH02A/	9	Surr	166	4	8.6	4	15.2	R	29	5	8.2	CR	7/24/08
IH02A/	10	Surr	166	4	8.3	4	15.4	1	28	1	8.1	BH	7/25/08
IH03A/	0	Surr	33	4	8.5	4	15.0	R	27	5	7.9	CR	7/15/08
IH03A/	1	Surr	33	4	6.9	4	15.7	R	28	5	7.9	CR	7/16/08
IH03A/	2	Surr	33	4	8.5	4	15.4	R	27	5	8.0	CR	7/17/08
IH03A/	3	Surr	33	4	8.2	4	15.7	R	30	5	8.0	MMS	7/18/08
IH03A/	4	Surr	33	4	8.3	4	15.7	R	29	5	8.0	CR	7/19/08
IH03A/	5	Surr	33	4	8.4	4	15.5	R	28	5	8.2	CR	7/20/08
IH03A/	6	Surr	33	4	8.2	4	16.0	R	29	5	8.1	MMS	7/21/08
IH03A/	7	Surr	33	4	8.4	4	15.4	R	29	5	8.2	B	7/22/08
IH03A/	8	Surr	33	4	8.5	4	15.4	R	28	5	8.0	J	7/23/08
IH03A/	9	Surr	33	4	8.6	4	15.4	R	28	5	8.0	CR	7/24/08
IH03A/	10	Surr	33	4	8.4	4	15.3	1	28	1	8.3	BH	7/25/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
IH05A/	0	Surr	105	4	8.0	4	15.8	R	28	5	8.0	CR	7/15/08
IH05A/	1	Surr	105	4	8.7	4	15.7	R	28	5	8.0	CR	7/16/08
IH05A/	2	Surr	105	4	8.2	4	15.6	R	28	5	8.1	CR	7/17/08
IH05A/	3	Surr	105	4	7.9	4	15.8	R	29	5	8.0	MMMB	7/18/08
IH05A/	4	Surr	105	4	8.1	4	15.9	R	29	5	8.1	CR	7/19/08
IH05A/	5	Surr	105	4	8.2	4	15.6	R	28	5	8.2	CR	7/20/08
IH05A/	6	Surr	105	4	8.1	4	16.0	R	28	5	8.1	MMMB	MMMB 7/21/08
IH05A/	7	Surr	105	4	8.3	4	15.6	R	28	5	8.2	B	7/22/08
IH05A/	8	Surr	105	4	8.4	4	15.4	R	28	5	8.5	f	7/23/08
IH05A/	9	Surr	105	4	8.6	4	15.4	R	28	5	8.1	CR	7/24/08
IH05A/	10	Surr	105	4	8.2	4	15.4	I	27	1	8.2	BH	7/25/08
IH06A/	0	Surr	143	4	8.4	4	15.6	R	28	5	8.0	CR	7/15/08
IH06A/	1	Surr	143	4	8.8	4	15.6	R	28	5	8.0	CR	7/16/08
IH06A/	2	Surr	143	4	8.5	4	15.4	R	28	5	8.1	CR	7/17/08
IH06A/	3	Surr	143	4	8.3	4	15.7	R	29	5	8.1	MMMB	7/18/08
IH06A/	4	Surr	143	4	8.2	4	15.8	R	29	5	8.2	CR	7/19/08
IH06A/	5	Surr	143	4	8.4	4	15.5	R	28	5	8.3	CR	7/20/08
IH06A/	6	Surr	143	4	8.3	4	15.9	R	28	5	8.0	MMMB	7/21/08
IH06A/	7	Surr	143	4	8.3	4	15.4	R	28	5	8.3	B	7/22/08
IH06A/	8	Surr	143	4	8.4	4	15.4	R	29	5	8.1	f	7/23/08
IH06A/	9	Surr	143	4	8.5	4	15.3	R	28	5	8.4	CR	7/24/08
IH06A/	10	Surr	143	4	8.3	4	15.4	I	27	1	8.5	BH	7/25/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
KP01A/.	0	Surr	41	4	8.3	4	15.8	R	27	S	7.9	CR	7/15/08
KP01A/.	1	Surr	41	4	8.8	4	15.5	R	28	S	8.0	CR	7/16/08
KP01A/.	2	Surr	41	4	8.5	4	15.4	R	27	S	8.0	CR	7/17/08
KP01A/.	3	Surr	41	4	8.2	4	15.7	R	30	S	8.1	NMB	7/18/08
KP01A/.	4	Surr	41	4	8.3	4	15.7	R	29	S	8.1	CR	7/19/08
KP01A/.	5	Surr	41	4	8.4	4	15.5	R	28	S	8.2	CR	7/20/08
KP01A/.	6	Surr	41	4	8.1	4	15.9	R	29	S	8.0	NMB	7/21/08
KP01A/.	7	Surr	41	4	8.4	4	15.4	R	29	S	8.2	B	7/22/08
KP01A/.	8	Surr	41	4	8.5	4	15.4	R	28	S	8.1	J	7/23/08
KP01A/.	9	Surr	41	4	8.4	4	15.5	R	28	S	8.1	CR	7/24/08
KP01A/.	10	Surr	41	4	8.4	4	15.1	I	28	I	8.2	BH	7/25/08
KP02A/.	0	Surr	49	4	8.3	4	15.8	R	27	S	7.9	CR	7/15/08
KP02A/.	1	Surr	49	4	8.8	4	15.5	R	28	S	8.0	CR	7/16/08
KP02A/.	2	Surr	49	4	8.4	4	15.4	R	27	S	8.0	CR	7/17/08
KP02A/.	3	Surr	49	4	8.2	4	15.9	R	29	S	8.0	NMB	7/18/08
KP02A/.	4	Surr	49	4	8.3	4	15.9	R	29	S	8.0	CR	7/19/08
KP02A/.	5	Surr	49	4	8.3	4	15.4	R	28	S	8.2	CR	7/20/08
KP02A/.	6	Surr	49	4	8.3	4	16.0	R	29	S	8.1	NMB	7/21/08
KP02A/.	7	Surr	49	4	8.4	4	18.4	R	29	S	8.2	B	7/22/08
KP02A/.	8	Surr	49	4	8.4	4	15.6	R	28	S	8.1	J	7/23/08
KP02A/.	9	Surr	49	4	8.6	4	15.4	R	28	S	8.1	CR	7/24/08
KP02A/.	10	Surr	49	4	7.6	4	15.8	I	27	I	8.2	BH	7/25/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	unit		
KP03A / .	0	Surr	178	4	8.5	4	15.5	R	28	S	8.0	CR	7/15/08
KP03A / .	1	Surr	178	4	8.9	4	15.2	R	28	S	7.9	CR	7/16/08
KP03A / .	2	Surr	178	4	8.6	4	15.3	R	28	S	8.0	CR	7/17/08
KP03A / .	3	Surr	178	4	8.2	4	15.7	R	28	S	7.7	MMB	7/18/08
KP03A / .	4	Surr	178	4	8.3	4	15.8	R	28	S	7.9	CR	7/19/08
KP03A / .	5	Surr	178	4	8.5	4	15.1	R	28	S	8.1	CR	7/20/08
KP03A / .	6	Surr	178	4	8.1	4	16.0	R	28	S	8.0	MMB	7/21/08
KP03A / .	7	Surr	178	4	8.2	4	15.7	R	27	S	7.8	TS	7/22/08
KP03A / .	8	Surr	178	4	8.5	4	15.4	R	29	S	8.4	✓	7/23/08
KP03A / .	9	Surr	178	4	8.6	4	15.3	R	29	S	8.1	CR	7/24/08
KP03A / .	10	Surr	178	4	8.1	4	15.9	R	27	✓	8.0	BH	7/25/08
MA01A / .	0	Surr	179	4	8.3	4	15.5	R	28	S	8.0	CR	7/15/08
MA01A / .	1	Surr	179	4	8.7	4	15.5	R	28	S	7.9	CR	7/16/08
MA01A / .	2	Surr	179	4	8.5	4	15.4	R	28	S	8.0	CR	7/17/08
MA01A / .	3	Surr	179	4	8.2	4	15.3	R	28	S	7.9	MMB	7/18/08
MA01A / .	4	Surr	179	4	8.2	4	15.8	R	28	S	8.0	CR	7/19/08
MA01A / .	5	Surr	179	4	8.4	4	15.4	R	28	S	8.1	CR	7/20/08
MA01A / .	6	Surr	179	4	8.1	4	16.1	R	28	S	8.0	MMB	7/21/08
MA01A / .	7	Surr	179	4	8.4	4	15.4	R	27	S	7.9	TS	7/22/08
MA01A / .	8	Surr	179	4	8.5	4	15.3	R	27	S	8.3	✓	7/23/08
MA01A / .	9	Surr	179	4	8.5	4	15.3	R	29	S	8.2	CR	7/24/08
MA01A / .	10	Surr	179	4	8.3	4	15.5	R	27	1	8.2	BH	7/25/08

① 16 7.85/08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR/HOB#	TEST START DATE 15-Jul-2008
				TEST END DATE 25-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
BL01A / .	0	Surr	118	4	8.0	4	15.9	R	29	S	8.0	CR	7/15/08
BL01A / .	1	Surr	118	4	8.3	4	15.5	R	29	S	8.0	CR	7/16/08
BL01A / .	2	Surr	118	4	7.9	4	15.4	R	29	S	8.0	CR	7/17/08
BL01A / .	3	Surr	118	4	7.7	4	15.5	R	29	S	8.1	MMMB	7/18/08
BL01A / .	4	Surr	118	4	8.0	4	15.7	R	29	S	8.1	CR	7/19/08
BL01A / .	5	Surr	118	4	8.0	4	15.5	R	29	S	8.2	CR	7/20/08
BL01A / .	6	Surr	118	4	7.9	4	15.8	R	29	S	8.2	MMMB	7/21/08
BL01A / .	7	Surr	118	4	8.0	4	15.5	R	29	S	8.2	TS	7/22/08
BL01A / .	8	Surr	118	4	8.0	4	15.4	R	29	S	8.4	L	7/23/08
BL01A / .	9	Surr	118	4	8.2	4	15.4	R	29	S	8.6	CR	7/24/08
BL01A / .	10	Surr	118	4	8.4	4	14.9	R	28	1	8.8	OK	7/25/08
CO02A / .	0	Surr	121	4	8.2	4	15.5	R	30	S	8.0	CR	7/15/08
CO02A / .	1	Surr	121	4	8.7	4	15.6	R	30	S	7.9	CR	7/16/08
CO02A / .	2	Surr	121	4	8.3	4	15.4	R	30	S	8.0	CR	7/17/08
CO02A / .	3	Surr	121	4	8.2	4	15.6	R	31	S	8.1	MMMB	7/18/08
CO02A / .	4	Surr	121	4	8.1	4	15.8	R	31	S	8.1	CR	7/19/08
CO02A / .	5	Surr	121	4	8.2	4	15.5	R	30	S	8.2	CR	7/20/08
CO02A / .	6	Surr	121	4	8.2	4	15.9	R	29	S	8.1	MMMB	7/21/08
CO02A / .	7	Surr	121	4	8.1	4	15.5	R	29	S	8.2	TS	7/22/08
CO02A / .	8	Surr	121	4	8.4	4	15.3	R	29	S	8.5	L	7/23/08
CO02A / .	9	Surr	121	4	8.4	4	15.4	R	29	S	8.5	CR	7/24/08
CO02A / .	10	Surr	121	4	8.4	4	14.7	R	29	1	8.6	BH	7/25/08

10 DAY SOLID PHASE TEST WATER QUALITY DATA



CLIENT Ecology & Environment 1101-004-880	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gambier/Bath 2	TEMP. RECDR./HOBOR#	TEST START DATE 15-Jul-2008	TEST END DATE 25-Jul-2008

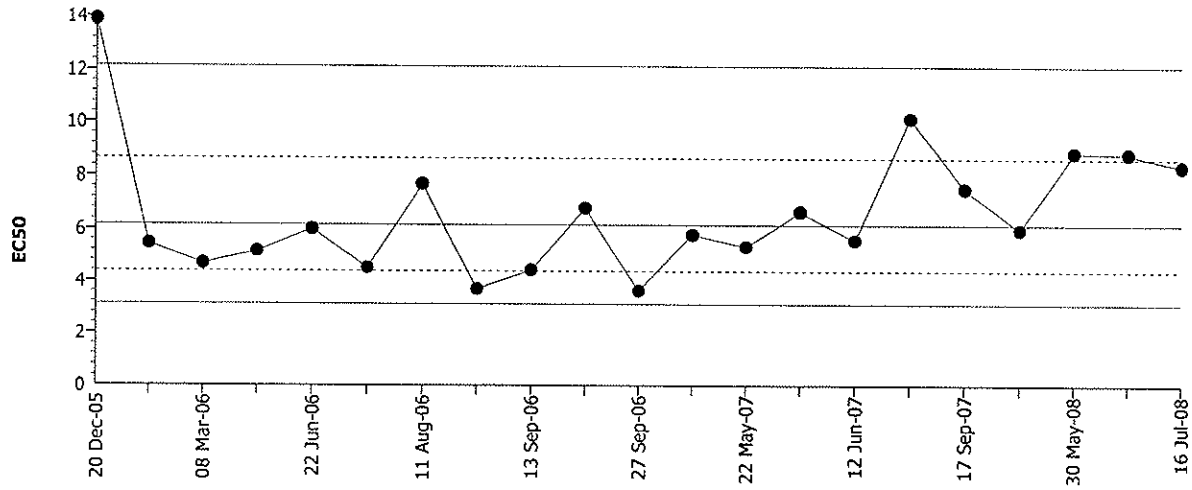
CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				> 5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	°C	meter	ppt	meter	unit		
DO03A /	0	Surr	40	4	8.5	4	15.4	R	27	S	7.9	CR	7/15/08
DO03A /	1	Surr	40	4	8.9	4	15.4	R	28	S	8.0	CR	7/16/08
DO03A /	2	Surr	40	4	8.5	4	15.4	R	27	S	8.0	CR	7/17/08
DO03A /	3	Surr	40	4	8.3	4	15.7	R	29	S	8.0	MMMB	7/18/08
DO03A /	4	Surr	40	4	8.3	4	15.9	R	29	S	8.0	CR	7/19/08
DO03A /	5	Surr	40	4	8.4	4	15.4	R	28	S	8.2	CR	7/20/08
DO03A /	6	Surr	40	4	8.3	4	15.8	R	29	S	8.1	MMMB	7/21/08
DO03A /	7	Surr	40	4	8.4	4	15.4	R	29	S	8.2	TS	7/22/08
DO03A /	8	Surr	40	4	8.5	4	15.4	R	28	S	8.0	CR	7/23/08
DO03A /	9	Surr	40	4	8.6	4	15.4	R	28	S	8.1	CR	7/24/08
DO03A /	10	Surr	40	4	8.4	4	15.2	R	28	S	7.9	BH	7/25/08
DO04A /	0	Surr	161	4	8.5	4	15.7	R	29	S	8.1	CR	7/15/08
DO04A /	1	Surr	161	4	9.0	4	15.4	R	30	S	8.0	CR	7/16/08
DO04A /	2	Surr	161	4	8.6	4	15.4	R	30	S	7.9	CR	7/17/08
DO04A /	3	Surr	161	4	8.4	4	15.5	R	30	S	8.1	MMMB	7/18/08
DO04A /	4	Surr	161	4	8.2	4	15.8	R	30	S	8.0	CR	7/19/08
DO04A /	5	Surr	161	4	8.5	4	15.4	R	29	S	8.3	CR	7/20/08
DO04A /	6	Surr	161	4	7.8	4	16.2	R	27	S	8.4	MMMB	7/21/08
DO04A /	7	Surr	161	4	8.4	4	15.3	R	30	S	8.6	TS	7/22/08
DO04A /	8	Surr	161	4	8.5	4	15.3	R	29	S	8.4	CR	7/23/08
DO04A /	9	Surr	161	4	8.5	4	15.4	R	30	S	8.3	CR	7/24/08
DO04A /	10	Surr	161	4	8.4	4	15.3	R	29	S	8.2	BH	7/25/08

WC CR 7/19

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: 6.15385 Count: 20 -1s Warning Limit: 4.37793 -2s Action Limit: 3.11452
 Sigma: CV: 40.57% +1s Warning Limit: 8.65017 +2s Action Limit: 12.1591

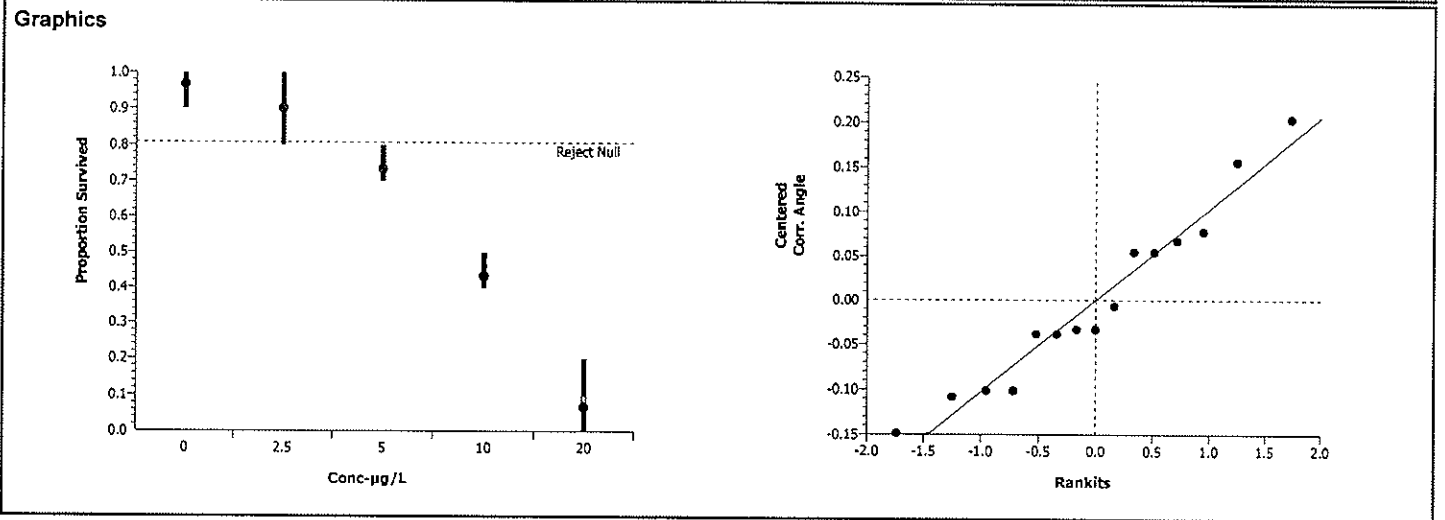
Quality Control Data										
Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2005	Dec	20	13.88309	7.72924	2.38940	(+)	(+)	17-0353-9586	13-0250-3970
2	2006	Mar	8	5.42834	-0.72551	-0.36841			10-3794-9585	01-7619-3108
3			8	4.66335	-1.49050	-0.81452			15-5983-1973	01-8530-0758
4			8	5.13594	-1.01791	-0.53103			12-6238-5677	07-4588-5444
5		Jun	22	5.99057	-0.16328	-0.07897			17-1591-2461	05-4082-2230
6		Jul	26	4.50104	-1.65281	-0.91856			10-7443-1576	14-0796-2659
7		Aug	11	7.69040	1.53655	0.65461			16-1376-4953	18-3640-7612
8			30	3.67616	-2.47769	-1.51310	(-)		05-1254-4340	07-4470-1159
9		Sep	13	4.41009	-1.74376	-0.97851			10-9673-5864	09-7524-5460
10			22	6.78907	0.63522	0.28850			05-2196-6286	15-5008-9467
11			27	3.60821	-2.54564	-1.56789	(-)		14-2711-1162	15-3243-2698
12	2007	May	18	5.78633	-0.36752	-0.18085			10-9949-6658	01-0514-6184
13			22	5.32422	-0.82963	-0.42529			02-6215-7262	07-0555-3037
14		Jun	8	6.65260	0.49875	0.22887			08-1478-6281	07-1616-4889
15			12	5.57512	-0.57873	-0.29005			12-4873-2529	01-1576-1244
16		Jul	20	10.14752	3.99367	1.46887	(+)		03-1740-6698	15-0085-4047
17		Sep	17	7.52045	1.36660	0.58898			13-0115-1998	01-0589-8584
18		Oct	23	5.97296	-0.18089	-0.08762			06-8083-9702	00-5598-3388
19	2008	May	30	8.87317	2.71932	1.07475	(+)		13-3382-4100	20-7672-2429
20		Jun	27	8.83113	2.67728	1.06081	(+)		14-3368-4084	04-4152-2772
21		Jul	16	8.35797	2.20412	0.89908			09-4785-0917	05-8512-9332

CETIS Analysis Detail

Eohaustorius 10-d Survival and Reburial Sediment Test							NewFields			
Endpoint	Analysis Type		Sample Link	Control Link	Date Analyzed	Version				
Proportion Survived	Comparison		09-4785-0917	09-4785-0917	17 Sep-08 11:31 AM	CETISv1.1.2				
Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD		
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		2.5	5	40	3.53553	16.36%		
Group Comparisons										
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)			
Dilution Water		2.5	1.04467	2.46559	0.3699	0.23985	Non-Significant Effect			
		5	3.37050	2.46559	0.0114	0.23985	Significant Effect			
		10	6.57313	2.46559	0.0001	0.23985	Significant Effect			
		20	11.2801	2.46559	0.0000	0.23985	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	2.376719	0.5941796	4	41.86	0.00000	Significant Effect				
Error	0.141942	0.0141942	10							
Total	2.51866053	0.6083738	14							
ANOVA Assumptions										
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)					
Variances	Bartlett	2.97422	13.27670	0.56215	Equal Variances					
Distribution	Shapiro-Wilk W	0.94951		0.51675	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	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409
2.5		3	0.90000	0.80000	1.00000	0.10000	1.25607	1.10715	1.41202	0.15256
5		3	0.73333	0.70000	0.80000	0.05774	1.02982	0.99116	1.10715	0.06697
10		3	0.43333	0.40000	0.50000	0.05774	0.71828	0.68472	0.78540	0.05813
20		3	0.06667	0.00000	0.20000	0.11547	0.26040	0.15878	0.46365	0.17602

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	1.00000	0.90000	1.00000							
2.5		1.00000	0.80000	0.90000							
5		0.70000	0.70000	0.80000							
10		0.40000	0.40000	0.50000							
20		0.00000	0.00000	0.20000							



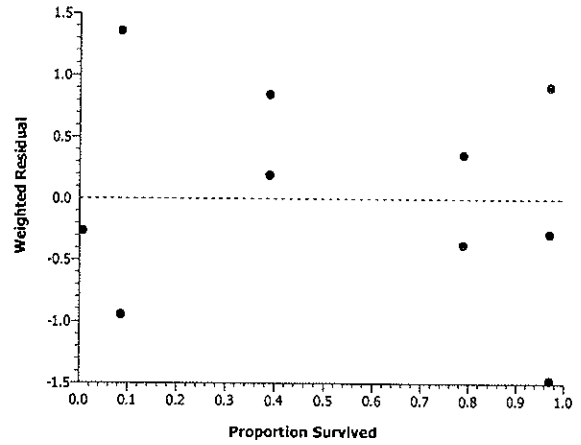
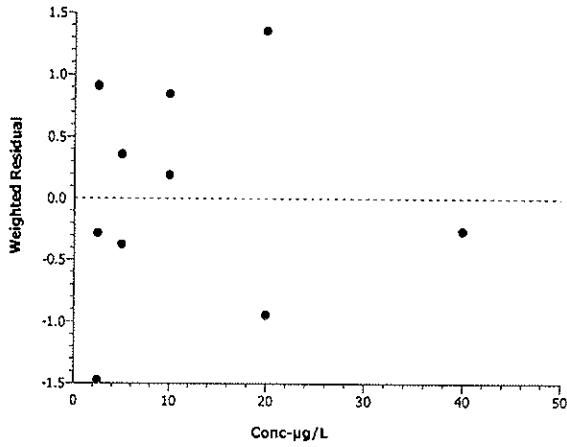
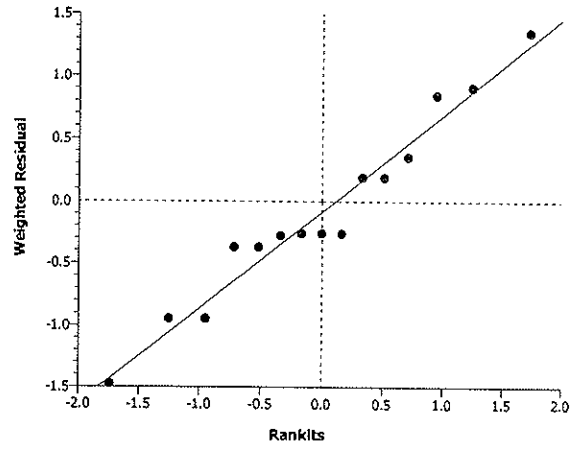
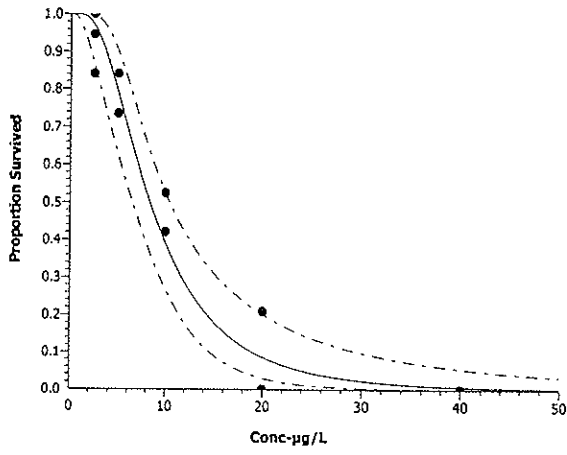
CETIS Analysis Detail

Linear Regression: Page 1 of 2
 Report Date: 17 Sep-08 11:32 AM
 Analysis: 05-8512-9332

Eohaustorius 10-d Survival and Reburial Sediment Test										NewFields	
Endpoint	Analysis Type		Sample Link	Control Link	Date Analyzed	Version					
Proportion Survived	Linear Regression		09-4785-0917	09-4785-0917	17 Sep-08 11:32 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)			
17	-53.39236	0.46747	0.27791	0.11417	8.10890	22.36203	0.83643	Non-Significant Heterogeneity			
Point Estimates											
% Effect	Conc-µg/L	95% LCL	95% UCL								
10	3.680787	2.035494	5.08292								
15	4.305884	2.55723	5.765227								
20	4.877567	3.059952	6.384244								
25	5.428143	3.562868	6.980612								
40	7.1071	5.168519	8.842586								
50	8.357973	6.385831	10.32035								
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	0.04807055	0.0344524	-0.01945615	0.1155973	1.395	0.18631	Not Significant				
Slope	3.598244	0.6203151	2.382426	4.814062	5.801	0.00006	Significant				
Intercept	1.682056	0.5794578	0.5463185	2.817793	2.903	0.01234	Significant				
Residual Analysis											
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)						
Variances	Bartlett	65.47249	9.48773	0.00000	Unequal Variances						
Distribution	Shapiro-Wilk W	0.9621653		0.72997	Normal Distribution						
Data Summary											
Conc-µg/L		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	0.80000	1.00000	0.02041	0.10000	27	30		
5		3	0.73333	0.70000	0.80000	0.01179	0.05774	22	30		
10		3	0.43333	0.40000	0.50000	0.01179	0.05774	13	30		
20		3	0.06667	0.00000	0.20000	0.02357	0.11547	2	30		
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30		

CETIS Analysis Detail

Graphics





Cadmium Reference Toxicant Test Water Quality Data Sheet for Eohs

CLIENT Ecology & Environment <small>NEWFIELDS JOB NUMBER</small> 1101-004-860 TEST ID P0804R07	PROJECT Port Angeles <small>PROJECT MANAGER</small> B. Hester LOT #: 06510TC	SPECIES Eohaustorius estuarius <small>QUANTITY OF STOCK: 6.0ml</small> ACTUAL: 1.0g <small>TEST START DATE</small> 16Jul08	NEWFIELDS LABORATORY Port Gamble Bath 2 <small>INIT</small> CR <small>QUANTITY OF DILUENT: 1500ml</small> ACTUAL: 1500ml <small>DATE PREP</small> 7/16/08 <small>TEST END DATE</small> 20Jul08 <small>TIME</small> 1430
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WATER QUALITY DATA

DILTN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT		LOT NO.	96-H LC ₅₀									
		cadmium chloride	cadmium chloride	cadmium	cadmium											
CLIENT/NEWFIELDS ID	CONCENTRATION	value	units	DAY	REP	TEST CONDITIONS			AMMONIA	SULFIDES						
						DO (mg/L)	TEMP(C)	SAL (ppt)			PH	TECHNICIAN				
Ref.Tox.-cadmium	0	mg/L				DO (mg/L)	TEMP(C)	SAL (ppt)	PH	TECHNICIAN	AMMONIA	SULFIDES				
						meter	meter	meter	meter	meter	METER	meter	meter	meter		
Ref.Tox.-cadmium	0	mg/L		0	Stock	4	7.6	4	15.9	R	28	5	7.9	CR		
Ref.Tox.-cadmium	0	mg/L		4	1	4	7.0	4	15.9	R	28	5	7.4	BH		
Ref.Tox.-cadmium	2.5	mg/L		0	Stock	4	7.5	4	16.3	R	28	5	7.9	CR		
Ref.Tox.-cadmium	2.5	mg/L		4	1	4	7.5	4	15.6	R	28	5	7.4	BH		
Ref.Tox.-cadmium	5	mg/L		0	Stock	4	7.6	4	15.4	R	28	5	7.9	CR		
Ref.Tox.-cadmium	5	mg/L		4	1	4	7.9	4	15.4	R	28	5	7.4	BH		
Ref.Tox.-cadmium	10	mg/L		0	Stock	4	7.8	4	15.5	R	28	5	7.9	CR		
Ref.Tox.-cadmium	10	mg/L		4	1	4	7.9	4	15.4	R	28	5	7.4	BH		
Ref.Tox.-cadmium	20	mg/L		0	Stock	4	7.8	4	15.6	R	28	5	8.0	CR		
Ref.Tox.-cadmium	20	mg/L		4	3	4	8.0	4	15.4	R	28	5	7.5	BH		
Ref.Tox.-cadmium	40	mg/L		0	Stock	4	7.6	4	15.7	R	28	5	8.0	CR		
Ref.Tox.-cadmium	40	mg/L		4	1	4										

Cadmium Reference Toxicant Test Survival Data Sheet for Eohs



SPECIES <i>Eohaustorius estuarius</i>
CLIENT Ecology & Environment
PROJECT Port Angeles
NEWFIELDS JOB NO. 1101-004-860
PROJECT MANAGER B. Hester
NEWFIELDS LABORATORY Port Gamble Bath 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				DATE			DATE			DATE			DATE			
				7/17/08			7/18/08			7/19/08			7/20/08			
INITIAL # OF ORGANISMS 10				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
				CR			MMB			CR			CR			
CLIENT/ NEWFIELDS ID	CONC.		REP	INITIAL NUMBER	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
	value	units			#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
Ref.Tox.- cadmium	0 mg/L		1	10	10	0	1F	10	0	1F	10	0	1F	10	0	N
			2	10	10	0	1F	10	0	1F	10	0	1F	9	1	N
			3	10	10	0	2F	10	0	2F	10	0	N	10	0	2F
Ref.Tox.- cadmium	2.5 mg/L		1	10	10	0	1F	10	0	1F	10	0	2F	10	0	N
			2	10	10	0	1F	10	0	2F	10	0	1F	8	2	N
			3	10	10	0	1F	10	0	N	10	0	N	9	1	N
Ref.Tox.- cadmium	5 mg/L		1	10	10	0	1F	9	1	1F	7	2	N	7	0	1F
			2	10	10	0	2F	9	1	3F	7	2	1F	7	0	1F
			3	10	10	0	2F	10	0	3F	9	1	3F	8	0	1NB
Ref.Tox.- cadmium	10 mg/L		1	10	8	2	N	7	1	N	5	2	1F	4	1	N
			2	10	10	0	1F	9	1	2F	7	2	1F	4	3	N
			3	10	9	1	N	8	1	N	8	0	N	5	3	N
Ref.Tox.- cadmium	20 mg/L		1	10	9	1	1F	7	2	N	0	7	DC			
			2	10	9	1	N	7	2	1F	2	5	DC	0	2	DC
			3	10	10	0	N	9	1	N	2	5	DC	2	0	N
Ref.Tox.- cadmium	40 mg/L		1	10	9	1	LOE	5	4	DC	0	5	DC			
			2	10	9	1	LOE	3	6	1F	0	3	DC			
			3	10	9	1	LOE	2	7	2F	0	2	DC			

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN		NEWFIELDS LABORATOR PROTOCOL		SPECIES										
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gambie Bath 2		PSEP 1995		Echaetorionus estuarius								
ENDPOINT DATA & OBSERVATIONS																				
CLIENT NEWFIELD ID	REP	JAR #	INITIAL # OF ORGANISMS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	NUMBER REMAINING							
				7/26/08	BH	N	7/29	TS	N	7/30	TS	N	8/1	CR	N	8/12	TS	N	8/13	TS
Control /	1	4	20										20							
	2	37											20							
	3	16											18							
	4	78											17							
	5	60											19							
RF01A /	1	43											19							
	2	18											19							
	3	28											19							
	4	25											20							
	5	12											17							
RF02A /	1	5											17							
	2	34											19							
	3	40											18							
	4	74											18							
	5	32											18							
RF03A /	1	3											16							
	2	54											15							
	3	9											13							
	4	61											17							
	5	82											16							

+babies
+babies
+babies

+babies

+worm

+worm

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR PROTOCOL		SPECIES	
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 2		Echaustionis estuarius	
INITIAL # OF ORGANISMS		DATE		DATE		DATE		DATE		DATE	
20		7/26/08		7/27/08		7/28		7/29		7/30	
REP		TECHNICIAN		TECHNICIAN		TECHNICIAN		TECHNICIAN		TECHNICIAN	
OBSERVATIONS		OBSERVATIONS		OBSERVATIONS		OBSERVATIONS		OBSERVATIONS		OBSERVATIONS	
E107A / .	1	48	BH	CR	TS	TS	CR	CR	TS	TS	BH
	2	77	IA	LS	N	N	N	N	N	N	IM
	3	52	3A	N	N	N	N	N	N	N	N
	4	15	4A	N	N	N	N	N	N	N	N
	5	55	N	N	N	N	N	N	N	N	IM
D005A / .	1	72	N	IA	N	N	N	N	N	N	N
	2	30	N	N	N	N	N	N	N	N	N
	3	66	N	N	N	N	N	N	N	N	N
	4	29	N	N	N	N	N	N	N	N	N
	5	47	N	N	N	N	N	N	N	N	N
E004A / .	1	1	17A, 3A	IM	IM	N	N	N	N	N	N
	2	10	17B, 3B	N	N	N	N	N	N	N	N
	3	26	4A	N	N	N	N	N	N	N	N
	4	22	7A	N	N	N	N	N	N	N	N
	5	51	7A	N	N	N	N	N	N	N	N
E003A / .	6	21	N	N	N	N	N	N	N	N	N
	7	38	N	N	N	N	N	N	N	N	N
	8	59	N	N	N	N	N	N	N	N	N
	9	19	N	N	N	N	N	N	N	N	N
	10	71	IA	IA	N	N	N	N	N	N	IA

① WC 7/26/08 BH @ WC 8:40 BH

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR PROTOCOL		SPECIES					
Ecology & Environment		Port Angeles		1:01-004-860		B. Hester		Port Gambie Bath 2		PSEP 1995		Eohaustorius estuarius			
INITIAL # OF ORGANISMS		DATE		TECHNICIAN		OBSERVATIONS		DATE		TECHNICIAN		OBSERVATIONS			
20		7/26/08		BH		CR		7/31		CR		8/12			
REP	JAX	INITIAL	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	DATE	TECHNICIAN	OBSERVATIONS	NUMBER REMAINING
1	46		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	0
2	84		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	0
3	50		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	2
4	7		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	0
5	76		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	0
1	23		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	19
2	57		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	19
3	35		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	20
4	80		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	20
5	56		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	20
1	83		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	16
2	79		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	20
3	62		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	16
4	13		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	20
5	69		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	19
1	6		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	19
2	20		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	17
3	8		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	16
4	39		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	18
5	27		7/26/08	BH	CR	7/28	CR	TS	7/30	CR	TS	8/12	TS	TS	16

① MC 7/28/08 BH
 ② W 7/28/08 CR
 ③ WE 8/2/08 TS
 ④ white flocculent 8:40 AM

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT	Ecology & Environment	PROJECT	NEWFIELDS JOB NO.		PROJECT MAN.	NEWFIELDS LABORATOR PROTOCOL		SPECIES
			1101-004-860	1101-004-860		Port Gamble Bath 2	PSEP 1995	
ENDPOINT DATA & OBSERVATIONS								
REP	INITIAL # OF ORGANISMS	DATE	TECHNICIAN	OBSERVS	DATE	TECHNICIAN	OBSERVS	NUMBER REMAINING
1	36	7/26/08	BM	N	7/29	TS	N	17
2	81	7/26/08	BM	N	7/30	TS	N	20
3	68	7/28	CR	N	7/31	CR	N	15
4	33	7/28	CR	N	8/1	CR	N	18
5	63	7/28	CR	N	8/1	CR	N	20
1	53	7/28	CR	N	8/3	TS	N	18
2	44	7/28	CR	N	8/3	TS	N	18
3	70	7/28	CR	N	8/12	TS	N	20
4	31	7/28	CR	N	8/12	TS	N	18
5	65	7/28	CR	N	8/12	TS	N	19

INITIAL # OF ORGANISMS
20

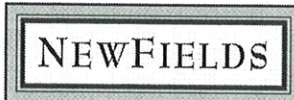
AS= Number on the Surface
L=Anoxic Surface
F=Fungal Patches
D=No Air Flow (DO?)
U=Excess food
N=Normal
B=No Burrows
A± Avoidance

CLIENT: NEWFIELDS ID

MD03A / .

WW01A / .

1m



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh, Batch 3	NewFields Test ID: 1101-004-860	Test Duration (days): 10
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 10
OVERLYING (OW) / POREWATER (PW) (circle one)

Calibration Standards Temperature	
Date:	Temperature:
7/27/08	19.5

Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.

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.	TS 7/28/08	0.708	19.0	TS 7/28/08	N	NA → 7		0.007						
RF01A	Surr.	↓	0.149	↓	↓	↓	↓	↓	0.008						
RF02A	Surr.		1.55						0.008						
RF03A	Surr.		4.20						0.007						
EI07A	Surr.		2.66						0.012						
DO05A	Surr.		<0.5						0.008						
EC04A	Surr.		1.66						0.007						
ED03A	Surr.		3.13						0.011						
ED04A	Surr.		18.8						0.029						
ED05A	Surr.		1.71						0.013						
MD01A	Surr.		2.45						0.010						
MD02A	Surr.		6.26						0.012						
MD03A	Surr.		2.90						0.008						
VW01A	Surr.		2.21						0.011						

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eoh, Batch 3	NewFields Test ID: 1101-004-860	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:	
7/27/08	19.5	

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.	7/28/08 TS	0.652	18.7	7/28/08 TS	N	7.6	30.0	0.013			
RF01A	Surr.	}	0.173	19.2	}	}	7.4	29.5	∅			
RF02A	Surr.		4.15	18.5			7.6	28	∅			
RF03A	Surr.		6.93	19.1			7.5	30	∅			
EI07A	Surr.		1.92	19.1			7.5	29	∅			
DO05A	Surr.		0.798	19.3			7.8	30	0.386			
EC04A	Surr.		3.64	18.5			7.4	30	∅			
ED03A	Surr.		5.02	18.7			7.4	29	∅			
ED04A	Surr.		31.5	19.0			7.6	28	0.900			
ED05A	Surr.		4.18	19.1			7.5	29	∅			
MD01A	Surr.		3.98	19.2			7.5	30	∅			
MD02A	Surr.		5.80	18.7			7.5	30	∅			
MD03A	Surr.		3.38	19.3			7.6	31	∅			
WW01A	Surr.		10.5	18.8			7.6	30	3.925			



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eohs, Batch 3	NewFields Test ID: 1101-004-860	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:	
8/11/08	19.0	

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
Control	Surr	8/11/08, MMB	<0.5	18.0	8/11/08, MMB, CR	N	X		0.000
RF01A	Surr		<0.5						0.010
RF02A	Surr		<0.5						0.014
RF03A	Surr		1.47						0.015
EI07A	Surr		3.15						0.012
DO05A	Surr		0.672						0.013
EC04A	Surr		0.995						0.007
ED03A	Surr		2.93						0.003
ED04A	Surr		16.0						4.33 0.233 ①
ED05A	Surr		1.24						0.026
MD01A	Surr		1.10						0.010
MD02A	Surr		7.99						0.020 ②
MD03A	Surr		2.09						0.007
WW01A	Surr	↓	<0.5	↓	↓	↓			0.009

- ① Dil. 2.5 ml sample + 22.5 ml DI H₂O
- ② Dil. 5.0 ml sample + 20 ml DI H₂O



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eohs, Batch 3	NewFields Test ID: 1101-004-860	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:	
8/11/08	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	8/11/08 MMB	< 0.5	20.5	8/11/08 MMB	N	7.4	28	0.020
RF01A	Surr		< 0.5				7.4	28	0.176
RF02A	Surr		< 0.5				7.5	29	0.048
RF03A	Surr		1.68				7.6	28	0.061
EI07A	Surr		3.78				7.6	29	0.149
DO05A	Surr		0.903				7.7	29	0.347
EC04A	Surr		1.37				7.4	28	0.293
ED03A	Surr		^{2.65} ① 1.37				7.2	29	0.240
ED04A	Surr		15.5				7.9	29	② 7.42
ED05A	Surr		1.12				7.6	29	0.259
MD01A	Surr		1.16				7.5	29	0.065
MD02A	Surr		6.69				7.5	29	0.222
MD03A	Surr		1.98				7.4	29	0.180
WW01A	Surr	↓	< 0.5	↓	↓	↓	7.8	29	0.164

① MC, MMB 8/11/08, $\text{NH}_3 = 2.65 \frac{\text{mg}}{\text{L}}$
② Dil. 2.5 ml sample + 22.5 ml DI H_2O



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 25-Jul-2008	TEST END DATE 4-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)				Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		D.O.		meter	°C	meter	ppt	meter	pH		
				meter	mg/L	meter	TEMP	meter	SALINITY	meter	unit	Date			
Control /	0	Surr	58	4	7.3	4	15.9	1	29	1	7.9	BK	7/25/08		
Control /	1	Surr	58	4	8.4	4	15.5	1	29	1	8.1	BH	7/26/08		
Control /	2	Surr	58	4	7.9	4	17.7/15.2	1	29	1	8.1	BK	7/27/08		
Control /	3	Surr	58	4	8.4	4	15.3	1	29	1	8.1	CR	7/28/08		
Control /	4	Surr	58	4	8.3	4	15.5	1	29	1	8.0	TS	7/29/08		
Control /	5	Surr	58	4	8.4	4	15.2	1	29	1	7.9	TS	7/30		
Control /	6	Surr	58	4	8.5	4	15.2	1	29	1	8.0	CR	7/31		
Control /	7	Surr	58	4	8.4	4	15.3	1	29	1	8.1	CR	8/1		
Control /	8	Surr	58	4	8.4	4	14.6	1	29	1	8.0	TS	8/2		
Control /	9	Surr	58	4	8.4	4	14.6	1	29	1	8.1	TS	8/3		
Control /	10	Surr	58	4	8.6	4	14.8	1	29	1	8.0	BH	8/4		
RF01A /	0	Surr	24	4	6.9	4	16.2	1	29	1	7.8	BH	7/25/08		
RF01A /	1	Surr	24	4	8.5	4	15.6	1	29	1	8.1	BH	7/26/08		
RF01A /	2	Surr	24	4	8.4	4	16.1/15.3	1	29	1	8.1	BH	7/27/08		
RF01A /	3	Surr	24	4	8.3	4	15.5	1	28	1	8.0	CR	7/28/08		
RF01A /	4	Surr	24	4	8.2	4	15.4	1	28	1	8.0	TS	7/29/08		
RF01A /	5	Surr	24	4	8.4	4	15.2	1	28	1	8.0	TS	7/30		
RF01A /	6	Surr	24	4	8.4	4	15.3	1	28	1	8.0	CR	7/31		
RF01A /	7	Surr	24	4	8.3	4	15.5	1	28	1	8.2	CR	8/1		
RF01A /	8	Surr	24	4	8.4	4	14.8	1	28	1	8.0	TS	8/2		
RF01A /	9	Surr	24	4	8.4	4	14.8	1	28	1	8.2	TS	8/3		
RF01A /	10	Surr	24	4	8.4	4	15.3	1	28	1	8.0	BH	8/4		

① Bath temp control malfunction. Control restored, measure retaken 7/27/08 BH
 ② r/c 8.4/08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME 14:30 /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 25-Jul-2008	TEST END DATE 4-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)				Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Date
				>5.0		15 ± 1		28 ± 1		7.8 ± 0.5					
				meter	mg/L	meter	°C	meter	ppt	meter	pH				
RF02A /	0	Surr	49	4	6.9	4	16.2	1	29	1	7.9	BH	7/25/08		
RF02A /	1	Surr	49	4	8.4	4	15.6	1	29	1	8.0	BH	7/26/08		
RF02A /	2	Surr	49	4	8.0	4	17.6/15.2	1	29	1	8.2	BH	7/27/08		
RF02A /	3	Surr	49	4	8.3	4	15.2	1	29	1	8.1	CR	7/28/08		
RF02A /	4	Surr	49	4	8.2	4	15.5	1	29	1	8.0	TS	7/29/08		
RF02A /	5	Surr	49	4	8.4	4	15.3	1	29	1	7.9	TS	7/30		
RF02A /	6	Surr	49	4	8.5	4	15.2	1	29	1	8.1	CR	7/31		
RF02A /	7	Surr	49	4	8.3	4	15.3	1	29	1	8.2	CR	8/1		
RF02A /	8	Surr	49	4	8.3	4	14.7	1	29	1	8.0	TS	8/2		
RF02A /	9	Surr	49	4	8.3	4	14.6	1	29	1	8.1	TS	8/3		
RF02A /	10	Surr	49	4	8.4	4	15.2	1	29	1	7.9	BH	8/4		
RF03A /	0	Surr	41	4	7.6	4	15.8	1	29	1	7.9	BH	7/25/08		
RF03A /	1	Surr	41	4	8.5	4	15.5	1	28	1	8.1	BH	7/26/08		
RF03A /	2	Surr	41	4	7.9	4	17.7/15.0	1	29	1	8.0	BH	7/27/08		
RF03A /	3	Surr	41	4	8.4	4	15.3	1	29	1	8.1	CR	7/28/08		
RF03A /	4	Surr	41	4	8.3	4	15.3	1	29	1	8.0	TS	7/29/08		
RF03A /	5	Surr	41	4	8.4	4	15.4	1	29	1	8.1	TS	7/30		
RF03A /	6	Surr	41	4	8.4	4	15.2	1	29	1	8.1	CR	7/31		
RF03A /	7	Surr	41	4	8.3	4	15.3	1	29	1	8.2	CR	8/1		
RF03A /	8	Surr	41	4	8.3	4	14.8	1	29	1	8.1	TS	8/2		
RF03A /	9	Surr	41	4	8.4	4	14.7	1	29	1	8.1	TS	8/3		
RF03A /	10	Surr	41	4	8.4	4	15.3	1	29	1	8.2	BH	8/4		

① Bath temp Control Malfunction - Control restarted, measure retaken 7.27.08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles B. Hester	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 25-Jul-2008	TEST END DATE 4-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	>5.0	meter	15 ± 1	meter	28 ± 1	meter	7.8 ± 0.5		
E107A /	0	Surr	14	4	6.7	4	16.1	1	29	1	7.9	BH	7/25/08
E107A /	1	Surr	14	4	8.5	4	15.8	1	29	1	8.2	BH	7/26/08
E107A /	2	Surr	14	4	7.9	4	17.8/15.6	1	29	1	8.2	BH	7/27/08
E107A /	3	Surr	14	4	8.2	4	15.8	1	29	1	8.0	CR	7/28/08
E107A /	4	Surr	14	4	8.2	4	15.8	1	28	1	8.1	TS	7/29/08
E107A /	5	Surr	14	4	8.5	4	15.2	1	29	1	8.1	TS	7/30
E107A /	6	Surr	14	4	8.3	4	15.5	1	29	1	8.1	CR	7/31
E107A /	7	Surr	14	4	8.2	4	15.8	1	29	1	8.3	CR	8/1
E107A /	8	Surr	14	4	8.3	4	15.1	1	29	1	8.1	TS	8/2
E107A /	9	Surr	14	4	8.3	4	15.3	1	29	1	8.1	TS	8/3
E107A /	10	Surr	14	4	8.4	4	15.0	1	29	1	8.1	YSH	8/4
DO05A /	0	Surr	17	4	6.8	4	15.9	1	29	1	7.9	BH	7/25/08
DO05A /	1	Surr	17	4	8.5	4	15.6	1	29	1	8.2	BH	7/26/08
DO05A /	2	Surr	17	4	7.9	4	17.8/15.4	1	29	1	8.2	BH	7/27/08
DO05A /	3	Surr	17	4	8.2	4	15.6	1	29	1	8.1	CR	7/28/08
DO05A /	4	Surr	17	4	8.2	4	15.5	1	29	1	8.1	TS	7/29/08
DO05A /	5	Surr	17	4	8.4	4	15.3	1	29	1	8.2	TS	7/30
DO05A /	6	Surr	17	4	8.3	4	15.0	1	29	1	8.2	CR	7/31
DO05A /	7	Surr	17	4	8.2	4	15.6	1	29	1	8.3	CR	8/1
DO05A /	8	Surr	17	4	8.3	4	15.0	1	29	1	8.2	TS	8/2
DO05A /	9	Surr	17	4	8.3	4	15.1	1	29	1	8.3	TS	8/3
DO05A /	10	Surr	17	4	8.4	4	15.3	1	29	1	8.3	BH	8/4

① Bath temp control malfunction. Control restored, measure retaken 7/27/08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuanus</i>
	NEWFIELDS LABORATORY Port Gambier/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 25-Jul-2008	TEST END DATE 4-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	mg/L	meter	°C	meter	ppt	meter	pH		
EC04A /	0	Surr	67	4	6.1	4	16.4	1	29	1	7.7	BH	7/25/08
EC04A /	1	Surr	67	4	8.3	4	16.0	1	29	1	8.1	BH	7/26/08
EC04A /	2	Surr	67	4	7.8	4	17.8/15.3	1	29	1	8.0	BH	7/27/08
EC04A /	3	Surr	67	4	8.3	4	15.5	1	29	1	8.1	CR	7/28/08
EC04A /	4	Surr	67	4	8.2	4	15.8	1	28	1	7.7	TS	7/29/08
EC04A /	5	Surr	67	4	8.4	4	15.2	1	29	1	8.1	TS	7/30
EC04A /	6	Surr	67	4	8.4	4	15.3	1	29	1	8.1	CR	7/31
EC04A /	7	Surr	67	4	8.3	4	15.4	1	29	1	8.2	CR	8/1
EC04A /	8	Surr	67	4	8.0	4	15.3	1	29	1	7.9	TS	8/2
EC04A /	9	Surr	67	4	8.2	4	14.9	1	29	1	8.0	TS	8/3
EC04A /	10	Surr	67	4	8.4	4	15.2	1	28	1	8.1	BH	8/4
ED03A /	0	Surr	2	4	6.8	4	16.4	1	29	1	7.9	BH	7/25/08
ED03A /	1	Surr	2	4	8.6	4	14.7	1	29	1	8.1	BH	7/26/08
ED03A /	2	Surr	2	4	7.8	4	17.8/15.4	1	29	1	8.2	BH	7/27/08
ED03A /	3	Surr	2	4	7.9	4	15.7	1	28	1	7.8	CR	7/28/08
ED03A /	4	Surr	2	4	7.9	4	16.0	1	28	1	7.9	TS	7/29/08
ED03A /	5	Surr	2	4	8.2	4	15.2	1	29	1	8.3	TS	7/30
ED03A /	6	Surr	2	4	8.1	4	15.7	1	29	1	8.1	CR	7/31
ED03A /	7	Surr	2	4	8.0	4	15.9	1	29	1	8.4	CR	8/1
ED03A /	8	Surr	2	4	8.2	4	14.8	1	29	1	8.2	TS	8/2
ED03A /	9	Surr	2	4	8.2	4	14.8	1	29	1	8.3	TS	8/3
ED03A /	10	Surr	2	4	8.2	4	15.3	1	28	1	8.3	BH	8/4

① Both temp control malfunction. Control restored, measure retaken 7/27/08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles B. Hester	START TIME/END TIME 1:30 /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOBOR#	TEST START DATE 25-Jul-2008	TEST END DATE 4-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	°C	meter	ppt	meter	pH		
ED04A /	0	Surr	11	4	6.7	4	15.9	1	29	1	7.8	BH	7/25/08
ED04A /	1	Surr	11	4	8.3	4	15.5	1	29	1	8.3	BH	7/26/08
ED04A /	2	Surr	11	4	7.7	4	17.8 ¹⁰ / _{15.5}	1	29	1	8.3	BH	7/27/08
ED04A /	3	Surr	11	4	8.1	4	15.6	1	29	1	8.1	CR	7/28/08
ED04A /	4	Surr	11	4	8.1	4	15.5	1	29	1	8.2	TS	7/29/08
ED04A /	5	Surr	11	4	8.4	4	15.2	1	29	1	8.3	TS	7/30
ED04A /	6	Surr	11	4	8.2	4	15.4	1	29	1	8.2	CR	7/31
ED04A /	7	Surr	11	4	8.1	4	15.7	1	29	1	8.4	CR	8/1
ED04A /	8	Surr	11	4	8.3	4	14.8	1	29	1	8.2	TS	8/2
ED04A /	9	Surr	11	4	8.2	4	14.8	1	29	1	8.3	TS	8/3
ED04A /	10	Surr	11	4	8.1	4	15.4	1	29	1	8.3	BH	8/4
ED05A /	0	Surr	64	4	7.7 + 6.5	4	16.1	1	29	1	7.7	BH	7/25/08
ED05A /	1	Surr	64	4	8.3	4	15.7	1	29	1	8.0	BH	7/26/08
ED05A /	2	Surr	64	4	8.0	4	17.7 ¹⁰ / _{15.4}	1	29	1	8.0	BH	7/27/08
ED05A /	3	Surr	64	4	8.4	4	15.4	1	29	1	8.1	CR	7/28/08
ED05A /	4	Surr	64	4	8.3	4	15.4	1	29	1	8.0	TS	7/29/08
ED05A /	5	Surr	64	4	8.4	4	15.8	1	29	1	7.8	TS	7/30
ED05A /	6	Surr	64	4	8.5	4	15.2	1	29	1	8.1	CR	7/31
ED05A /	7	Surr	64	4	8.4	4	15.3	1	29	1	8.2	CR	8/1
ED05A /	8	Surr	64	4	8.4	4	14.7	1	29	1	8.0	TS	8/2
ED05A /	9	Surr	64	4	8.4	4	14.6	1	29	1	8.1	TS	8/3
ED05A /	10	Surr	64	4	8.3	4	15.4	1	28	1	7.9	BH	8/4

① PR 7.2500 PM Bath temp control malfunction. Control restored, measure retained 7.27.08 BH

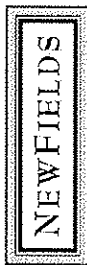


10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	TEST SPECIES Eohaustorius estuarius
	NEWFIELDS LABORATORY Port Gamble/Bath 2		TEMP. RECDR./HOB#	TEST START DATE 25-Jul-2008
				TEST END DATE 4-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		15±1		28±1		7.8±0.5			
				meter	mgl.	meter	°C	meter	ppt	meter	unit		
MD01A / .	0	Surr	73	4	7.2	4	15.4	1	29	1	7.7	BH	7/25/08
MD01A / .	1	Surr	73	4	8.3	4	15.7	1	29	1	8.0	BH	7/26/08
MD01A / .	2	Surr	73	4	8.0	4	17.1/15.0	1	29	1	8.0	BH	7/27/08
MD01A / .	3	Surr	73	4	8.2	4	15.4	1	29	1	8.0	CR	7/28/08
MD01A / .	4	Surr	73	4	8.1	4	15.6	1	29	1	7.9	TS	7/29/08
MD01A / .	5	Surr	73	4	8.2	4	15.2	1	29	1	8.0	TS	7/30
MD01A / .	6	Surr	73	4	8.4	4	15.3	1	29	1	8.0	CR	7/31
MD01A / .	7	Surr	73	4	8.3	4	15.3	1	29	1	8.2	CR	8/1
MD01A / .	8	Surr	73	4	8.2	4	14.9	1	29	1	7.9	TS	8/2
MD01A / .	9	Surr	73	4	8.3	4	14.7	1	29	1	8.0	TS	8/3
MD01A / .	10	Surr	73	4	8.3	4	15.2	1	29	1	8.1	BH	8/4
MD02A / .	0	Surr	75	4	6.5	4	15.5	1	29	1	8.0	BH	7/25/08
MD02A / .	1	Surr	75	4	7.9	4	15.6	1	29	1	7.9	BH	7/26/08
MD02A / .	2	Surr	75	4	7.5	4	17.6/M.9	1	29	1	7.9	BH	7/27/08
MD02A / .	3	Surr	75	4	7.9	4	15.4	1	29	1	7.9	CR	7/28/08
MD02A / .	4	Surr	75	4	7.6	4	15.5	1	29	1	7.8	TS	7/29/08
MD02A / .	5	Surr	75	4	8.0	4	15.2	1	29	1	8.0	TS	7/30
MD02A / .	6	Surr	75	4	8.1	4	15.1	1	29	1	8.0	CR	7/31
MD02A / .	7	Surr	75	4	8.0	4	15.3	1	29	1	8.1	CR	8/1
MD02A / .	8	Surr	75	4	8.1	4	14.8	1	29	1	8.0	TS	8/2
MD02A / .	9	Surr	75	4	8.2	4	14.7	1	29	1	8.1	TS	8/3
MD02A / .	10	Surr	75	4	8.3	4	14.7	1	29	1	8.2	BH	8/4

Ⓟ Bath temp control malfunction. Control restored, measure retaken 7.27.08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEMP. RECDR./HOB#	TEST START DATE 25-Jul-2008
				TEST END DATE 4-Aug-2008

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
MD03A /	0	Surr	45	4	7.3	4	16.3	1	29	1	7.9	BH	7/25/08
MD03A /	1	Surr	45	4	8.1	4	15.6	1	29	1	8.0	BH	7/26/08
MD03A /	2	Surr	45	4	7.9	4	17.6/15.2	1	29	1	8.1	BH	7/27/08
MD03A /	3	Surr	45	4	8.3	4	15.2	1	29	1	8.1	CR	7/28/08
MD03A /	4	Surr	45	4	8.1	4	15.5	1	29	1	8.1	TS	7/29/08
MD03A /	5	Surr	45	4	8.3	4	15.3	1	29	1	8.2	TS	7/30
MD03A /	6	Surr	45	4	8.3	4	15.2	1	29	1	8.4	CR	7/31
MD03A /	7	Surr	45	4	8.2	4	15.4	1	29	1	8.5	CR	8/1
MD03A /	8	Surr	45	4	8.3	4	14.7	1	29	1	8.3	TS	8/2
MD03A /	9	Surr	45	4	8.3	4	14.7	1	29	1	8.3	TS	8/3
MD03A /	10	Surr	45	4	8.6	4	14.9	1	29	1	8.3	BH	8/4
WW01A /	0	Surr	42	4	7.5	4	16.3	1	29	1	8.0	BH	7/25/08
WW01A /	1	Surr	42	4	8.4	4	15.6	1	29	1	8.1	BH	7/26/08
WW01A /	2	Surr	42	4	7.9	4	17.7/15.2	1	29	1	8.2	BH	7/27/08
WW01A /	3	Surr	42	4	8.4	4	15.2	1	29	1	8.1	CR	7/28/08
WW01A /	4	Surr	42	4	8.2	4	15.4	1	29	1	8.0	TS	7/29/08
WW01A /	5	Surr	42	4	8.3	4	15.3	1	29	1	8.1	TS	7/30
WW01A /	6	Surr	42	4	8.5	4	15.2	1	29	1	8.1	CR	7/31
WW01A /	7	Surr	42	4	8.3	4	15.3	1	29	1	8.2	CR	8/1
WW01A /	8	Surr	42	4	8.3	4	14.7	1	29	1	8.0	TS	8/2
WW01A /	9	Surr	42	4	8.4	4	14.7	1	29	1	8.1	TS	8/3
WW01A /	10	Surr	42	4	8.3	4	15.3	1	29	1	8.1	BH	8/4

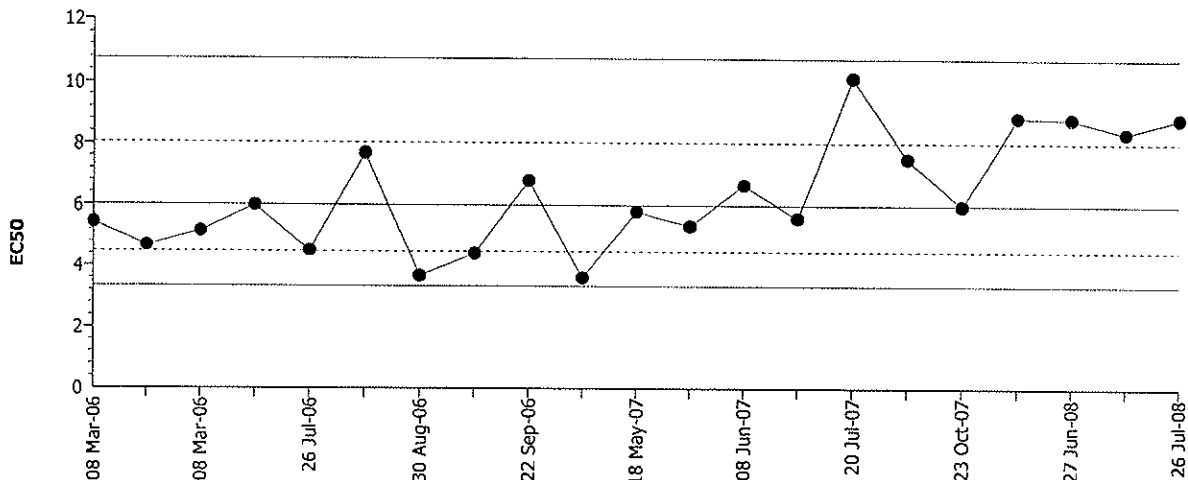
① Daily temp control malfunction. control restored. measure retaken 7.27.08 BH

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: 5.99967 Count: 20 -1s Warning Limit: 4.47965 -2s Action Limit: 3.34473
 Sigma: CV: 33.93% +1s Warning Limit: 8.03546 +2s Action Limit: 10.7620

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Mar	8	5.42834	-0.57134	-0.34253			10-3794-9585	01-7619-3108
2			8	4.66335	-1.33632	-0.86244			15-5983-1973	01-8530-0758
3			8	5.13594	-0.86374	-0.53205			12-6238-5677	07-4588-5444
4		Jun	22	5.99057	-0.00910	-0.00520			17-1591-2461	05-4082-2230
5		Jul	26	4.50104	-1.49863	-0.98370			10-7443-1576	14-0796-2659
6		Aug	11	7.69040	1.69073	0.84977			16-1376-4953	18-3640-7612
7			30	3.67616	-2.32352	-1.67661	(-)		05-1254-4340	07-4470-1159
8		Sep	13	4.41009	-1.58959	-1.05357	(-)		10-9673-5864	09-7524-5460
9			22	6.78907	0.78939	0.42309			05-2196-6286	15-5008-9467
10			27	3.60821	-2.39147	-1.74047	(-)		14-2711-1162	15-3243-2698
11	2007	May	18	5.78633	-0.21334	-0.12393			10-9949-6658	01-0514-6184
12			22	5.32422	-0.67546	-0.40882			02-6215-7262	07-0555-3037
13		Jun	8	6.65260	0.65292	0.35358			08-1478-6281	07-1616-4889
14			12	5.57512	-0.42455	-0.25120			12-4873-2529	01-1576-1244
15		Jul	20	10.14752	4.14785	1.79876	(+)		03-1740-6698	15-0085-4047
16		Sep	17	7.52045	1.52077	0.77328			13-0115-1998	01-0589-8584
17		Oct	23	5.97296	-0.02672	-0.01528			06-8083-9702	00-5598-3388
18	2008	May	30	8.87317	2.87349	1.33943	(+)		13-3382-4100	20-7672-2429
19		Jun	27	8.83113	2.83146	1.32318	(+)		14-3368-4084	04-4152-2772
20		Jul	16	8.35797	2.35830	1.13469	(+)		09-4785-0917	05-8512-9332
21			26	8.84336	2.84369	1.32791	(+)		04-2285-3356	06-1210-3839

CETIS Analysis Detail

Eohaustorius 10-d Survival and Reburial Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	04-2285-3356	04-2285-3356	04 Sep-08 3:03 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	22.36%

Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.43225	2.46559	0.6353	0.30986	Non-Significant Effect
		5	1.49262	2.46559	0.2146	0.30986	Non-Significant Effect
		10	5.40715	2.46559	0.0005	0.30986	Significant Effect
		20	9.10752	2.46559	0.0000	0.30986	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	2.868894	0.7172234	4	30.27	0.00001	Significant Effect
Error	0.2369138	0.0236914	10			
Total	3.10580742	0.7409148	14			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	2.71500	13.27670	0.60659	Equal Variances
Distribution	Shapiro-Wilk W	0.95776		0.65351	Normal Distribution

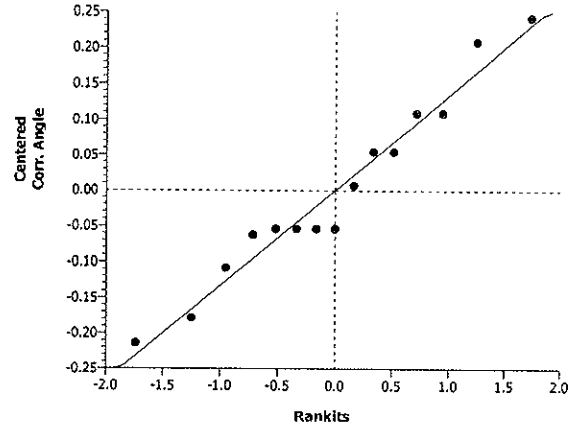
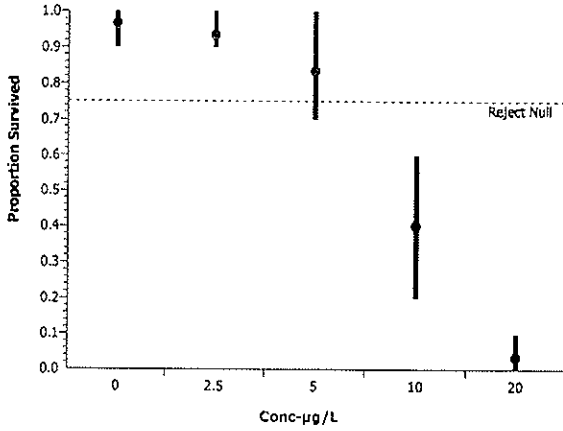
Data Summary		Original Data					Transformed Data			
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409
2.5		3	0.93333	0.90000	1.00000	0.05773	1.30337	1.24905	1.41202	0.09409
5		3	0.83333	0.70000	1.00000	0.15275	1.17011	0.99116	1.41202	0.21738
10		3	0.40000	0.20000	0.60000	0.20000	0.67815	0.46365	0.88608	0.21129
20		3	0.03333	0.00000	0.10000	0.05774	0.21310	0.15878	0.32175	0.09409

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	1.00000	0.90000	1.00000							
2.5		0.90000	0.90000	1.00000							
5		0.70000	0.80000	1.00000							
10		0.40000	0.60000	0.20000							
20		0.00000	0.10000	0.00000							

Graphics



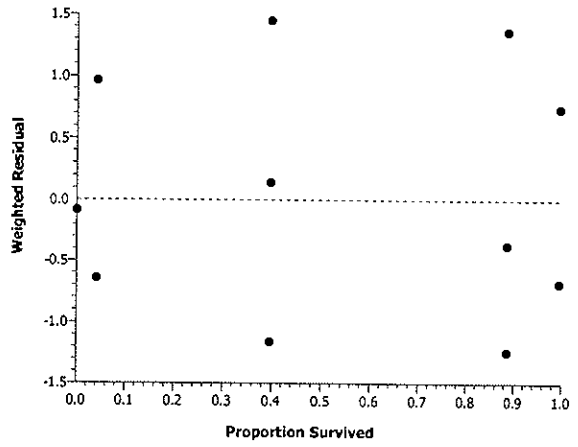
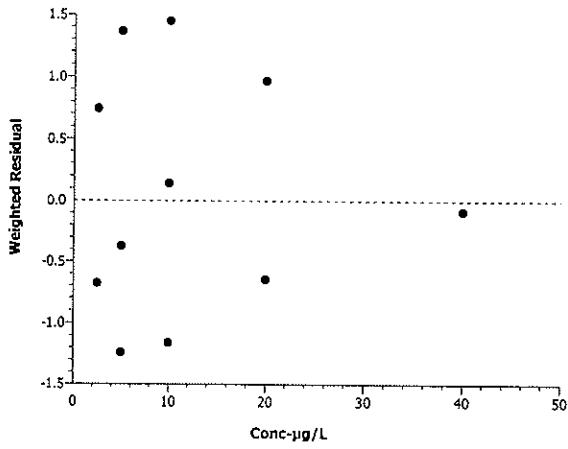
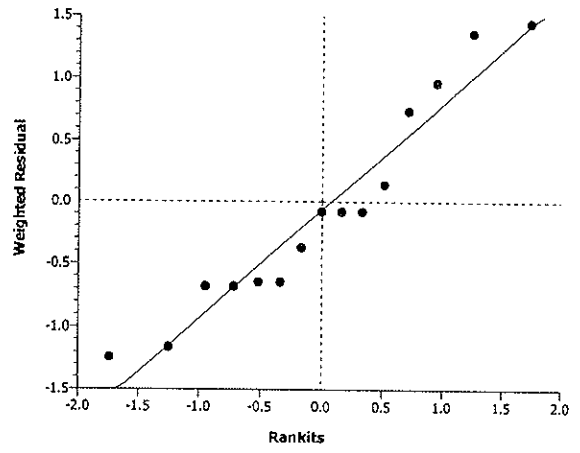
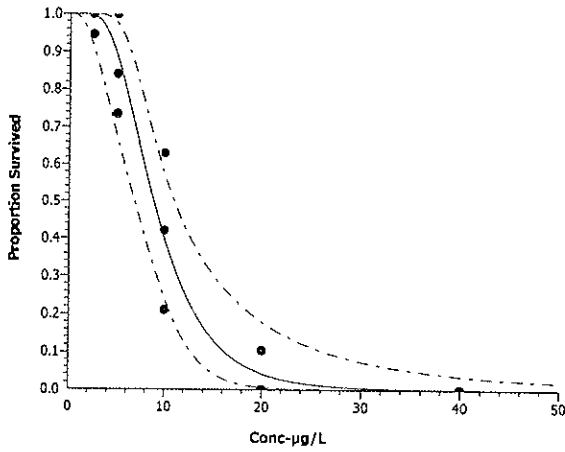
CETIS Analysis Detail

Linear Regression: Page 1 of 2
 Report Date: 04 Sep-08 3:03 PM
 Analysis: 06-1210-3839

Eohaustorius 10-d Survival and Reburial Sediment Test							NewFields		
Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version				
Proportion Survived	Linear Regression	04-2285-3356	04-2285-3356	04 Sep-08 3:03 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	-43.50143	0.08016	0.20535	0.13686	10.27542	22.36203	0.67127	Non-Significant Heterogeneity	
Point Estimates									
% Effect	Conc-µg/L	95% LCL	95% UCL						
10	4.824414	2.963632	6.207597						
15	5.417274	3.533998	6.809529						
20	5.939999	4.057505	7.342138						
25	6.428471	4.560323	7.845359						
40	7.844971	6.05674	9.370515						
50	8.843362	7.104051	10.54502						
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	0.04854655	0.02905274	-0.00839683	0.1054899	1.671	0.11861	Not Significant		
Slope	4.86962	0.9191428	3.0681	6.67114	5.298	0.00014	Significant		
Intercept	0.390333	0.8796891	-1.333858	2.114524	0.444	0.66454	Not Significant		
Residual Analysis									
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)				
Variances	Bartlett	69.0635	9.48773	0.00000	Unequal Variances				
Distribution	Shapiro-Wilk W	0.9221137		0.20746	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
2.5		3	0.93333	0.90000	1.00000	0.01179	0.05773	28	30
5		3	0.83333	0.70000	1.00000	0.03118	0.15275	25	30
10		3	0.40000	0.20000	0.60000	0.04082	0.20000	12	30
20		3	0.03333	0.00000	0.10000	0.01179	0.05774	1	30
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30

CETIS Analysis Detail

Graphics





Cadmium Reference Toxicant Test Water Quality Data Sheet for Eohs

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860 TEST ID P080418.10	PROJECT Port Angeles PROJECT MANAGER B. Hester LOT #: 0651 OTC (2008)	SPECIES Eohaustorius estuarius QUANTITY OF STOCK : 6.0ml ACTUAL: 6.0ml TEST START DATE 26Jul08	NEWFIELDS LABORATORY Port Gamble Bath 2 INIT VSH DATE PREP 7/26/08 TEST END DATE 30Jul08 TIME 1400
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WATER QUALITY DATA

DILTN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT									
		cadmium chloride	cadmium chloride	cadmium	cadmium								
FSW072608.01	NA	cadmium chloride		cadmium									
TEST CONDITIONS													
CLIENT/NEWFIELDS ID	CONCENTRATION	value	units	DO (mg/L)		TEMP (C)	SAL (ppt)	pH	TECHNICIAN	Date			
				meter	meter						meter	unit	
Ref.Tox.-cadmium	0	mg/L		4	7.6	4	15.8	1	28	1	7.79	PH	7/27/08
				4	7.0	4	15.9	1	27	1	7.5	CR	7/28
				4	7.1	4	16.3	1	27	1	7.4	TS	7/29
				4	7.7	4	15.7	1	27	1	7.4	TS	7/30
				4	7.5	4	15.5	1	27	1	7.3	CR	7/31
Ref.Tox.-cadmium	2.5	mg/L		4	7.7	4	15.5	1	28	1	7.9	PH	7/27/08
				4	7.8	4	15.5	1	27	1	7.6	CR	7/28
				4	7.3	4	15.7	1	27	1	7.6	TS	7/29
				4	7.6	4	15.5	1	27	1	7.6	TS	7/30
				4	7.7	4	15.3	1	27	1	7.6	CR	7/31
Ref.Tox.-cadmium	5	mg/L		4	7.7	4	15.5	1	28	1	7.9	PH	7/27/08
				4	7.8	4	15.4	1	27	1	7.7	CR	7/28
				4	7.4	4	15.6	1	27	1	7.6	TS	7/29
				4	7.7	4	15.4	1	27	1	7.7	TS	7/30
				4	7.2	4	15.1	1	27	1	7.7	CR	7/31



Cadmium Reference Toxicant Test Water Quality Data Sheet for Eohs

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860 TEST ID R080418.10	PROJECT Port Angeles PROJECT MANAGER B. Hester LOT #: 06510TC (2008)	SPECIES <i>Eohaustorius estuarius</i> QUANTITY OF STOCK: 6.0ml ACTUAL: 6.0ml TEST START DATE 26Jul08	NEWFIELDS LABORATORY Port Gamble Bath 2 INIT DATE PREP 7/26/08 QUANTITY OF DILUENT: 1500ml ACTUAL: 1500.0 ml TEST END DATE 30Jul08 TIME 1545 PROTOCOL PSEP 1995
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WATER QUALITY DATA

DIL.TIN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT							
		cadmium chloride	cadmium chloride	cadmium	cadmium						
TEST CONDITIONS		DO (mg/L)	TEMP(C)	SAL (ppt)	pH						
CLIENT/NEWFIELDS ID	CONCENTRATION value	D.O.		SALINITY		TECHNICIAN					
		meter	mg/L	meter	ppt		meter	unit			
Ref.Tox.-cadmium	10 mg/L	meter	°C	meter	ppt	WG TECH					
		value	units	REP	DAY		Date				
Ref.Tox.-cadmium	10 mg/L	4	7.8	4	15.5	1	28	1	7.9	BH	7/27/08
		4	7.2	4	15.4	1	27	1	7.7	CR	7/28
		4	7.5	4	15.6	1	27	1	7.7	TS	7/29
		4	7.7	4	15.4	1	27	1	7.7	TS	7/30
		4	7.9	4	15.1	1	27	1	7.8	CR	7/31
Ref.Tox.-cadmium	20 mg/L	4	7.8	4	15.4	1	28	1	8.0	BH	7/27/08
		4	7.8	4	15.4	1	27	1	7.8	CR	7/28
		4	7.7	4	15.5	1	27	1	7.7	TS	7/29
		4	7.7	4	15.4	1	27	1	7.8	TS	7/30
		4	8.1	4	15.2	1	27	1	7.8	CR	7/31
Ref.Tox.-cadmium	40 mg/L	4	7.9	4	15.3	1	28	1	8.0	BH	7/27/08
		4	7.6	4	15.4	1	27	1	7.8	CR	7/28
		4	7.7	4	15.5	1	27	1	7.8	TS	7/29
		4	7.8	4	15.3	1	27	1	7.8	TS	7/30
		4	8.0	4	15.2	1	27	1	7.8	CR	7/31

Cadmium Reference Toxicant Test Survival Data Sheet for Eohs



SPECIES <i>Eohaustorius estuarius</i>			
CLIENT Ecology & Environment	PROJECT Port Angeles	NEWFIELDS JOB NO. 1101-004-860	PROJECT MANAGER B. Hester
NEWFIELDS LABORATORY Port Gamble Bath 2		PROTOCOL PSEP 1995	

SURVIVAL & BEHAVIOR DATA

OBSERVATION KEY N = Normal LOE = Loss of equilibrium Q = Quiescent DC = Discoloration NB = No body F = Floating on surface				DATE			DATE			DATE			DATE			
				7/28/08			7/29/08			7/30			7/31			
INITIAL # OF ORGANISMS 10				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
				CR			TS			TS			CR			
CLIENT/ NEWFIELDS ID	CONC.		REP	INITIAL NUMBER	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
	value	units			#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
Ref.Tox.- cadmium	0 mg/L		1	10	10	0	1F	10	0	N	10	0	N	10	0	N
			2	10	10	0	N	10	0	N	10	0	1F	9	1	N
			3	10	10	0	1F	10	0	N	10	0	N	10	0	N
Ref.Tox.- cadmium	2.5 mg/L		1	10	10	0	3F	10	0	1F	10	0	2F	9	1	1F
			2	10	10	0	N	10	0	N	9	1	2F	9	0	N
			3	10	10	0	N	10	0	N	10	0	N	10	0	N
Ref.Tox.- cadmium	5 mg/L		1	10	10	0	1F	9	1	N	7	2	2F	7	0	N
			2	10	10	0	N	9	1	N	8	1	1F	8	0	N
			3	10	10	0	N	10	0	N	10	0	N	10	0	N
Ref.Tox.- cadmium	10 mg/L		1	10	10	0	1F	10	0	2F	7	3	N	4	3	N
			2	10	10	0	N	9	1	N	9 ^①	0	N	6	3	DC
			3	10	9	1	N	9	0	N	3	6	N ^②	2	1	DC
Ref.Tox.- cadmium	20 mg/L		1	10	10	0	2F	10	0	Q	4	6	Q ^③	0	4	DC
			2	10	10	0	2F	8	2	Q	3	5	Q ^③	1	2	DC
			3	10	10	0	3F	10	0	1F, Q	3	7	1F, Q	0	3	DC
Ref.Tox.- cadmium	40 mg/L		1	10	7	3	N	5	2	Q	0	5	NA	—	—	—
			2	10	9	1	3F	7	2	2F, Q	3	4	Q	0	3	DC
			3	10	9	1	N	6	3	Q	0	6	NA	—	—	—

① WE TS 7/30

② lots of babies removed TS 7/30

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR/PROTOCOL		SPECIES	
Ecology & Environment		Port Angeles		1101-004-960		B. Hester		Port Gamble Bath 2		Eohaustorius estuarius	
CLIENT/NEWFIELD ID		REP	BAR	WVPC	DATE	TECHNICIAN	OBSERVS	DATE	TECHNICIAN	OBSERVS	NUMBER REMAINING
Ecology & Environment					8/12	TS	N	8/12	TS	N	20
#S= Number on the Surface					8/13	TS	N	8/13	TS	N	20
#M= Number of Mortality					8/14	BH	N	8/14	BH	N	20
L=Anoxic Surface					8/15	MP	N	8/15	MP	N	20
F=Fungal Patches					8/16	BH	N	8/16	BH	N	20
D=No Air Flow (DO?)					8/17	MMB	N	8/17	MMB	N	20
U=Excess food					8/18	MMB	N	8/18	MMB	N	20
N=Normal					8/19			8/19			19
B=No Burrows					8/20			8/20			20
Control /		1	18		8/20			8/20			20
		2	41		8/20			8/20			20
		3	1		8/20			8/20			20
		4	2		8/20			8/20			20
		5	60		8/20			8/20			20
RF01A /		1	31		8/19			8/19			19
		2	21		8/20			8/20			20
		3	43		8/20			8/20			20
		4	49		8/17			8/17			17
		5	5		8/18			8/18			18
RF02A /		1	58		8/18	IM	N	8/18	IM	N	18
		2	13		8/20	N	N	8/20	N	N	20
		3	35		8/19	N	N	8/19	N	N	19
		4	54		8/19	IM	N	8/19	IM	N	19
		5	26		8/20	IM	N	8/20	IM	N	20
RF03A /		1	37		8/14	N	N	8/14	N	N	14
		2	52		8/17	N	N	8/17	N	N	17
		3	63		8/18	IS	N	8/18	IS	N	18
		4	56		8/19	IS	N	8/19	IS	N	19
		5	32		8/20	N	N	8/20	N	N	20

① IE - MP

200
190

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR/PROTOCOL		SPECIES											
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 2 PSEP 1995		Eohaustorius estuarius											
INITIAL # OF ORGANISMS		DATE		DATE		DATE		DATE		DATE											
20		TECHNICIAN		TECHNICIAN		TECHNICIAN		TECHNICIAN		TECHNICIAN											
REP		OBSERVANS		OBSERVANS		OBSERVANS		OBSERVANS		OBSERVANS											
CLIENT/NEWFIELDS ID		OBSERVANS		OBSERVANS		OBSERVANS		OBSERVANS		OBSERVANS											
E102A / .	1	33	8/2	TS	8/3	TS	8/4	MM	8/5	MP	8/6	BA	8/7	MMB	8/8	MMB	8/9	BA	8/10	BA	20
	2	57																			18
	3	39																			19
	4	19																			20
	5	25																			19
IE07A / .	1	14					9S	1S	1S	1S	9M	16M	16M	16M	16M	16M	16M	16M	16M	16M	20
	2	38					1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	1S	20
	3	24																			20
	4	9																			20
	5	12																			17
RL01A / .	1	48																			20
	2	36																			19
	3	27																			20
	4	22																			19
	5	30																			18
RL02A / .	6	61																			20
	7	55																			20
	8	40																			18
	9	34																			20
	10	23																			20

① Removed meth from jar MP

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR/ PROTOCOL		SPECIES																					
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 2		Eohaustorius estuarius																					
CLIENT/NEWFIELD ID		REP	JAR #	INITIAL # OF ORGANISMS	DATE	TECHNICIAN	OBSERVNS	DATE	TECHNICIAN	OBSERVNS	NUMBER REMAINING																				
C001A / .	1	15	20	8/12	TS	N	8/13	TS	N	8/14	WHL	N	8/15	BH	N	8/16	BH	N	8/17	MMB	N	8/18	MMB	N	8/19	BSH	N	8/20	N	20	
	2	66																													19
	3	42																													20
	4	46																													18
	5	53																													18
C004A / .	1	28																													17
	2	16																													19
	3	8																													19
	4	59																													20
	5	11																													18
LA02A / .	1	6																													19
	2	7																													17
	3	64																													20
	4	47																													19
	5	62																													20
EC01A Acclimated / .	1																														19
	2																														18
	3																														19
	4																														20
	5																														19

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR PROTOCOL		SPECIES												
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gambie Bath 2		Eohaustorius estuarius												
INITIAL # OF ORGANISMS		ENDPOINT DATA & OBSERVATIONS																				
20		REP	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	NUMBER REMAINING									
EC01A Unacclimated / .	1	8/2	TS	8/2	TS	8/3	TS	8/4	BSH	8/5	MP	8/6	BSH	8/7	MMB	8/8	MMB	8/9	BSH	8/10	BSH	18
	2																					18
	3																					17
	4																					20
	5																					20
EC02A / .	1																					20
	2																					19
	3																					16
	4																					17
	5																					19



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E & E Port Angeles	Organism: Ech Batch #24	NewFields Test ID:	Test Duration (days): 10d
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PRETEST INITIAL / FINAL / OTHER (circle one) DAY of TEST: 8/1/08
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:	
8/1/08	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
ϕ	surr	TS 8/1/08	<0.5	20.0	TS 8/1/08	N	NA \rightarrow		0.001
RFO1			<0.5						0.014
RFO2			<0.5						0.013
RFO3			0.886						0.016
E102			<0.5						0.017
IE07			0.809						0.032
RL01			<0.5						0.013
RL02			1.35						0.017
COO1			<0.5						0.013
COO4			<0.5						0.015
LA02			<0.5						0.029
ECO1 Unacc			<0.5						0.215
ECO1 ACC			<0.5						0.003
ECO2			<0.5						0.017



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E Port Angeles	Organism: Ech Batch # 4	NewFields Test ID:	Test Duration (days): 10d
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PRETEST (INITIAL) / FINAL / OTHER (circle one) DAY of TEST: 8/1/08
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:	
8/1/08	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
\emptyset	surv	B 8/1/08	<0.5	20.0	B 8/1/08	N	7.6	27	0.013
RFO1			<0.5				7.4	27	0.189
RFO2			1.54				7.5	29	0.412
RFO3			2.47				7.8	29	0.058
E102			1.95				7.7	29	0.206
IE07			4.43				7.8	29	0.320
RLO1			3.52				7.9	29	0.176
RLO2			7.84				7.9	29	0.324
COO1			<0.5				7.7	29	0.140
COO4			<0.5				7.7	29	0.088
LA02			1.34				7.7	29 26	0.072
ECO1 Unacc			1.07				7.0 7.0	26	0.158
ECO1 Acc			0.669				7.7	26	0.188
ECO2			<0.05				7.5	28	0.150 0.07



Ammonia Analysis Total Ammonia (mg/L)

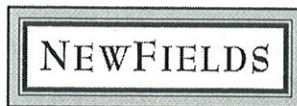
Client/Project: E&E/ Port Angeles	Organism: Eohs (UV)	NewFields Test ID: 1101-004-860	Test Duration (days): 10
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: _____
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
8/12/08	20.5	

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	8/12/08 MMB	40.5	19.0	8/12/08 MMB	N	/		0.007
RF01A	Surr		40.5						0.001
RF02A	Surr		40.5						0.003
RF03A	Surr		40.5						0.012
EI02A	Surr		40.5						0.008
IE07A	Surr		40.5						0.007
RL01A	Surr		40.5						0.007
RL02A	Surr		40.5						0.007
CO01A	Surr		40.5						0.006
CO04A	Surr		40.5						0.004
LA02A	Surr		40.5						0.013
EC01A Acclimated	Surr		40.5						0.011
EC01A Unacclimated	Surr		40.5						0.006
EC02A	Surr		40.5						0.005

① Sample swr. broken down day before; did collect a data, but not PW MMB 8/12/08



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eohs (UV)	NewFields Test ID: 1101-004-860	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:	
8/12/08	20.5	

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	8/12/08 MMB	<0.5	21.0	8/12/08 MMB	N	7.4	29	0.058
RF01A	Surr		<0.5				7.4	29	0.105
RF02A	Surr		<0.5				7.3	29	0.091
RF03A	Surr		<0.5				7.6	29	0.072
EI02A	Surr		<0.5				7.5	29	0.150
IE07A	Surr						7.4	29	
RL01A	Surr		<0.5				7.4	29	0.054
RL02A	Surr		0.931				7.5	29	0.079
CO01A	Surr		<0.5				7.6	29	0.126
CO04A	Surr		<0.5				7.5	29	0.052
LA02A	Surr		<0.5				7.5	29	0.044
EC01A Acclimated	Surr		<0.5				7.1	27	0.160
EC01A Unacclimated	Surr		<0.5				6.8	27	0.060
EC02A	Surr		<0.5				7.4	28	0.106



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW073108.01	TEST SPECIES Eohaustorius estuarius
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR/HOBO#	TEST START DATE 1-Aug-2008	TEST END DATE 11-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				> 5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	mg/L	meter	°C	meter	ppt	meter	unit		
Control /	0	Surr	65	4	8.2	4	15.3	1	28	1	8.0	BH	8/1/08
Control /	1	Surr	65	4	8.3	4	15.2	1	28	1	7.9	TS	8/2
Control /	2	Surr	65	4	8.3	4	14.8	1	28	1	7.9	TS	8/3
Control /	3	Surr	65	4	8.4	4	15.3	1	28	1	7.9	BH	8/4
Control /	4	Surr	65	4	8.2	4	15.9	1	28	1	7.9	MP	8/5
Control /	5	Surr	65	4	8.7	4	15.8	1	28	1	8.0	BH	8/6
Control /	6	Surr	65	4	8.4	4	15.8	1	28	1	7.9	MMS	8/7
Control /	7	Surr	65	4	8.5	4	15.7	1	28	1	8.0	MMS	8/8
Control /	8	Surr	65	4	8.5	4	15.5	1	28	1	8.0	BH	8/9
Control /	9	Surr	65	4	8.5	4	15.3	1	28	1	8.1	BH	8/10
Control /	10	Surr	65	4	8.3	4	15.2	1	28	1	8.1	CR	8/11
RF01A /	0	Surr	4	4	8.1	4	15.5	1	28	1	8.0	BH	8/1/08
RF01A /	1	Surr	4	4	8.2	4	14.8	1	28	1	7.9	TS	8/2
RF01A /	2	Surr	4	4	8.4	4	14.8	1	28	1	7.9	TS	8/3
RF01A /	3	Surr	4	4	8.3	4	15.3	1	28	1	8.0	BH	8/4
RF01A /	4	Surr	4	4	8.4	4	15.5	1	28	1	8.0	MP	8/5
RF01A /	5	Surr	4	4	8.4	4	15.3	1	28	1	7.9	BH	8/6
RF01A /	6	Surr	4	4	8.3	4	15.9	1	28	1	7.9	MMS	8/7
RF01A /	7	Surr	4	4	8.5	4	15.8	1	28	1	8.0	MMS	8/8
RF01A /	8	Surr	4	4	8.4	4	15.6	1	28	1	8.1	BH	8/9
RF01A /	9	Surr	4	4	8.1	4	15.5	1	28	1	8.1	BH	8/10
RF01A /	10	Surr	4	4	7.9	4	15.3	1	28	1	7.9	CR	8/11

0.5 8.508 MP



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW073108.01	TEST SPECIES <i>Eohaustorius estuarinus</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 1-Aug-2008
				TEST END DATE 11-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				> 5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	mg/L	meter	°C	meter	ppt	meter	pH		
RF02A/.	0	Surr	50	4	8.3	4	15.2	1	28	1	8.0	BH	8/1/08
RF02A/.	1	Surr	50	4	8.4	4	14.6	1	28	1	7.9	JS	8/2
RF02A/.	2	Surr	50	4	8.4	4	14.6	1	28	1	7.9	JS	8/3
RF02A/.	3	Surr	50	4	8.4	4	15.3	1	28	1	7.9	BH	8/4
RF02A/.	4	Surr	50	4	8.2	4	16.0	1	28	1	7.9	MP	8/5
RF02A/.	5	Surr	50	4	8.3	4	15.4	1	28	1	8.0	BH	8/6
RF02A/.	6	Surr	50	4	8.4	4	15.9	1	28	1	7.9	MMS	8/7
RF02A/.	7	Surr	50	4	8.5	4	15.6	1	28	1	8.0	MMS	8/8
RF02A/.	8	Surr	50	4	8.3	4	15.8	1	28	1	8.0	BH	8/9
RF02A/.	9	Surr	50	4	8.4	4	15.6	1	28	1	8.1	BH	8/10
RF02A/.	10	Surr	50	4	8.2	4	15.1	1	28	1	8.0	CR	8/4
RF03A/.	0	Surr	20	4	8.3	4	15.3	1	28	1	8.0	BH	8/1/08
RF03A/.	1	Surr	20	4	8.3	4	14.8	1	28	1	7.9	JS	8/2
RF03A/.	2	Surr	20	4	8.4	4	14.8	1	28	1	7.9	JS	8/3
RF03A/.	3	Surr	20	4	8.3	4	15.4	1	28	1	8.0	BH	8/4
RF03A/.	4	Surr	20	4	8.3	4	15.3	1	28	1	8.0	MP	8/5
RF03A/.	5	Surr	20	4	8.4	4	15.4	1	28	1	8.0	BH	8/6
RF03A/.	6	Surr	20	4	8.3	4	15.6	1	28	1	8.0	MMS	8/7
RF03A/.	7	Surr	20	4	8.4	4	15.6	1	28	1	8.0	MMS	8/8
RF03A/.	8	Surr	20	4	8.4	4	15.5	1	28	1	8.4	BH	8/9
RF03A/.	9	Surr	20	4	8.1	4	15.2	1	28	1	8.3	BH	8/10
RF03A/.	10	Surr	20	4	8.2	4	15.2	1	28	1	8.5	CR	8/11



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW073108.01	TEST SPECIES <i>Eohaustorius estuarius</i>
	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 1-Aug-2008	
			TEST END DATE 11-Aug-2008	

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
EI02A /	0	Surr	17	4	8.3	4	15.3	1	28	1	8.0	BH	8/1/08
EI02A /	1	Surr	17	4	8.3	4	14.8	1	28	1	7.9	TS	8/2
EI02A /	2	Surr	17	4	8.3	4	14.8	1	28	1	7.9	TS	8/3
EI02A /	3	Surr	17	4	8.4	4	15.4	1	28	1	8.0	BH	8/4
EI02A /	4	Surr	17	4	8.4	4	15.4	1	28	1	8.0	MP	8/5
EI02A /	5	Surr	17	4	8.4	4	15.4	1	28	1	8.0	BH	8/6
EI02A /	6	Surr	17	4	8.3	4	15.8	1	28	1	8.0	MMS	8/7
EI02A /	7	Surr	17	4	8.5	4	15.5	1	28	1	7.9	MMS	8/8
EI02A /	8	Surr	17	4	8.4	4	15.5	1	28	1	8.2	BH	8/9
EI02A /	9	Surr	17	4	8.3	4	15.4	1	28	1	8.2	BH	8/10
EI02A /	10	Surr	17	4	8.4	4	15.1	1	29	1	8.3	CR	8/11
IE07A /	0	Surr	29	4	8.2	4	15.3	1	28	1	8.0	BH	8/1/08
IE07A /	1	Surr	29	4	8.3	4	14.8	1	28	1	7.9	TS	8/2
IE07A /	2	Surr	29	4	8.5	4	14.8	1	29	1	7.9	TS	8/3
IE07A /	3	Surr	29	4	8.3	4	15.4	1	28	1	8.0	BH	8/4
IE07A /	4	Surr	29	4	8.3	4	15.6	1	28	1	8.0	MP	8/5
IE07A /	5	Surr	29	4	8.3	4	15.5	1	28	1	8.0	BH	8/6
IE07A /	6	Surr	29	4	8.4	4	15.6	1	28	1	8.1	MMS	8/7
IE07A /	7	Surr	29	4	8.4	4	15.5	1	28	1	8.2	MMS	8/8
IE07A /	8	Surr	29	4	8.4	4	15.5	1	28	1	8.4	BH	8/9
IE07A /	9	Surr	29	4	8.1	4	15.6	1	28	1	8.3	BH	8/10
IE07A /	10	Surr	29	4	8.3	4	15.2	1	29	1	8.6	CR	8/11



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSWG73108.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECORD/HOBO#	TEST START DATE 1-Aug-2008
				TEST END DATE 11-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	mg/L	meter	°C	meter	ppt	meter	unit		
RL01A/.	0	Surr	10	4	8.3	4	15.3	1	28	1	8.1	BH	8/1/08
RL01A/.	1	Surr	10	4	8.3	4	14.7	1	28	1	7.9	TS	8/2
RL01A/.	2	Surr	10	4	8.4	4	14.7	1	28	1	8.0	TS	8/3
RL01A/.	3	Surr	10	4	8.4	4	15.3	1	28	1	8.0	BH	8/4
RL01A/.	4	Surr	10	4	8.4	4	15.5	1	28	1	8.0	MP	8/5
RL01A/.	5	Surr	10	4	8.4	4	15.4	1	28	1	8.1	BH	8/6
RL01A/.	6	Surr	10	4	8.5	4	15.6	1	28	1	8.1	MMS	8/7
RL01A/.	7	Surr	10	4	8.3	4	15.7	1	28	1	7.8	MMS	8/8
RL01A/.	8	Surr	10	4	8.5	4	15.5	1	28	1	8.2	BH	8/9
RL01A/.	9	Surr	10	4	8.3	4	15.4	1	28	1	8.3	BH	8/10
RL01A/.	10	Surr	10	4	8.4	4	15.1	1	29	1	8.2	CR	8/11
RL02A/.	0	Surr	45	4	8.2	4	15.5	1	28	1	8.1	BH	8/108
RL02A/.	1	Surr	45	4	8.3	4	14.7	1	28	1	7.9	TS	8/2
RL02A/.	2	Surr	45	4	8.4	4	14.9	1	28	1	8.0	TS	8/3
RL02A/.	3	Surr	45	4	8.4	4	15.1	1	28	1	8.0	BH	8/4
RL02A/.	4	Surr	45	4	8.3	4	15.6	1	28	1	8.1	MP	8/5
RL02A/.	5	Surr	45	4	8.4	4	15.5	1	28	1	8.1	BH	8/6
RL02A/.	6	Surr	45	4	8.4	4	15.8	1	28	1	8.1	MMS	8/7
RL02A/.	7	Surr	45	4	8.6	4	15.7	1	28	1	8.2	MMS	8/8
RL02A/.	8	Surr	45	4	8.5	4	15.6	1	28	1	8.4	BH	8/9
RL02A/.	9	Surr	45	4	8.5	4	15.5	1	28	1	8.3	BH	8/10
RL02A/.	10	Surr	45	4	8.4	4	15.1	1	29	1	8.3	CR	8/11

① MR, MMS 8/7/08



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW073108.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 1-Aug-2008	TEST END DATE 11-Aug-2008

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
CO01A / .	0	Surr	3	4	8.4	4	15.0	1	28	1	8.0	BK	8/1/08
CO01A / .	1	Surr	3	4	8.3	4	15.0	1	28	1	7.8	TS	8/2
CO01A / .	2	Surr	3	4	8.4	4	14.8	1	28	1	7.9	TS	8/3
CO01A / .	3	Surr	3	4	8.3	4	15.2	1	28	1	7.9	BH	8/4
CO01A / .	4	Surr	3	4	8.4	4	15.5	1	28	1	7.9	MP	8/5
CO01A / .	5	Surr	3	4	8.4	4	15.3	1	28	1	8.0	BH	8/6
CO01A / .	6	Surr	3	4	8.4	4	15.4	1	28	1	7.9	MMS	8/7
CO01A / .	7	Surr	3	4	8.4	4	15.7	1	28	1	8.0	MMS	8/8
CO01A / .	8	Surr	3	4	8.4	4	15.5	1	28	1	8.1	BK	8/9
CO01A / .	9	Surr	3	4	8.3	4	15.4	1	28	1	8.1	BK	8/10
CO01A / .	10	Surr	3	4	8.4	4	15.1	1	28	1	8.1	CR	8/11
CO04A / .	0	Surr	51	4	8.4	4	15.1	1	28	1	8.0	BH	8/1/08
CO04A / .	1	Surr	51	4	8.3	4	15.1	1	28	1	7.9	TS	8/2
CO04A / .	2	Surr	51	4	8.3	4	15.0	1	28	1	7.9	TS	8/3
CO04A / .	3	Surr	51	4	8.3	4	15.6	1	28	1	8.0	BH	8/4
CO04A / .	4	Surr	51	4	8.4	4	15.7	1	28	1	8.0	MP	8/5
CO04A / .	5	Surr	51	4	8.7	4	15.6	1	28	1	8.1	BK	8/6
CO04A / .	6	Surr	51	4	8.5	4	16.0	1	28	1	8.1	MMS	8/7
CO04A / .	7	Surr	51	4	8.8	4	16.0	1	28	1	8.2	MMS	8/8
CO04A / .	8	Surr	51	4	9.7	4	16.0	1	28	1	8.4	BK	8/9
CO04A / .	9	Surr	51	4	8.9	4	15.7	1	28	1	8.3	BH	8/10
CO04A / .	10	Surr	51	4	8.7	4	15.3	1	28	1	8.2	CR	8/11



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW073108.01	TEST SPECIES Echaustoritus estuarius
	NEWFIELDS LABORATORY Port Gamble/Bath 2		TEMP. RECORD/HOBO#	TEST START DATE 1-Aug-2008
				TEST END DATE 11-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	TEMP	meter	ppt	meter	pH		
LA02A / .	0	Surr	44	4	6.1	4	15.6	1	28	1	7.9	BH	8/1/08
LA02A / .	1	Surr	44	4	8.3	4	14.7	1	28	1	7.8	TS	8/2
LA02A / .	2	Surr	44	4	8.2	4	14.9	1	28	1	7.9	TS	8/3
LA02A / .	3	Surr	44	4	8.3	4	15.4	1	28	1	7.9	BH	8/4
LA02A / .	4	Surr	44	4	8.4	4	15.4	1	28	1	8.0	MP	8/5
LA02A / .	5	Surr	44	4	8.4	4	15.6	1	28	1	8.0	BH	8/6
LA02A / .	6	Surr	44	4	8.3	4	15.8	1	28	1	8.0	MMS	8/7
LA02A / .	7	Surr	44	4	8.5	4	15.6	1	28	1	8.1	MMS	8/8
LA02A / .	8	Surr	44	4	8.5	4	15.6	1	28	1	8.2	BH	8/9
LA02A / .	9	Surr	44	4	8.3	4	15.5	1	28	1	8.2	BH	8/10
LA02A / .	10	Surr	44	4	8.4	4	15.7	1	29	1	8.4	CR	8/11
EC01A Acclimated / .	0	Surr		4	8.3	4	15.2	1	27	1	7.9	BH	8/1/08
EC01A Acclimated / .	1	Surr		4	8.4	4	15.5	1	27	1	7.8	TS	8/2
EC01A Acclimated / .	2	Surr		4	8.4	4	14.8	1	27	1	7.9	TS	8/3
EC01A Acclimated / .	3	Surr		4	8.4	4	15.3	1	27	1	7.8	BH	8/4
EC01A Acclimated / .	4	Surr		4	8.4	4	15.5	1	27	1	7.8	MP	8/5
EC01A Acclimated / .	5	Surr		4	8.4	4	15.4	1	27	1	7.8	BH	8/6
EC01A Acclimated / .	6	Surr		4	8.3	4	15.8	1	27	1	7.8	MMS	8/7
EC01A Acclimated / .	7	Surr		4	8.5	4	15.7	1	27	1	7.8	MMS	8/8
EC01A Acclimated / .	8	Surr		4	8.5	4	15.6	1	27	1	8.1	BH	8/9
EC01A Acclimated / .	9	Surr		4	8.4	4	15.5	1	27	1	8.2	BH	8/10
EC01A Acclimated / .	10	Surr		4	8.5	4	15.7	1	27	1	7.8	CR	8/11

① ml 8.6.08 BH



10 DAY SOLID PHASE TEST WATER QUALITY DATA

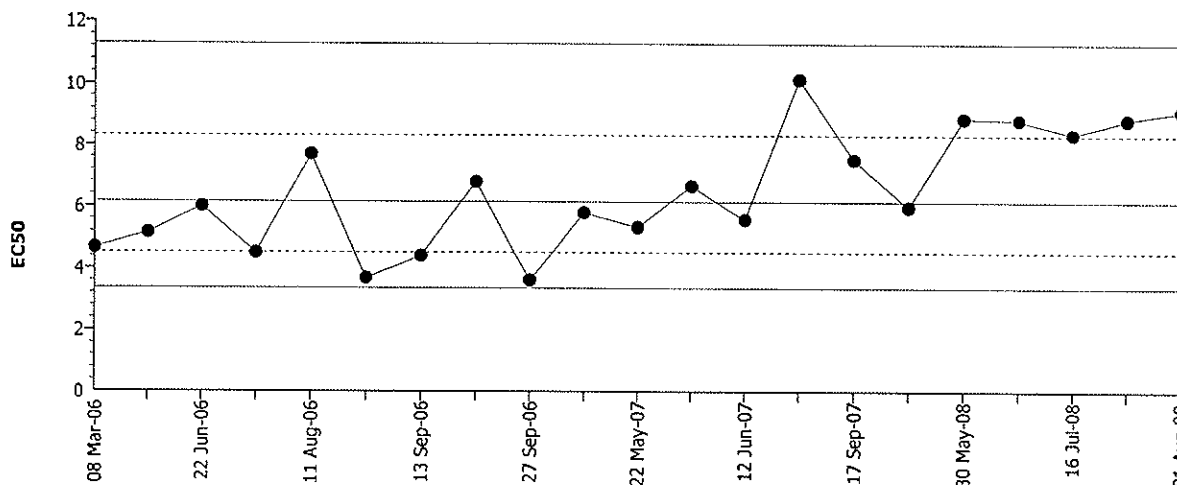
CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW073108.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble/Bath 2	TEMP. RECDR./HOB#	TEST START DATE 1-Aug-2008
				TEST END DATE 11-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
EC01A Unacclimated /.	0	Surr		4	7.8	4	15.6	1	28	1	7.7	CR	8/1/08
EC01A Unacclimated /.	1	Surr		4	8.3	4	14.8	1	28	1	7.7	TS	8/2
EC01A Unacclimated /.	2	Surr		4	8.4	4	14.8	1	27	1	7.9	TS	8/3
EC01A Unacclimated /.	3	Surr		4	8.3	4	15.5	1	27	1	7.8	BH	8/4
EC01A Unacclimated /.	4	Surr		4	8.3	4	15.6	1	27	1	7.6	MP	8/5
EC01A Unacclimated /.	5	Surr		4	8.4	4	15.5	1	26	1	7.9	BH	8/6
EC01A Unacclimated /.	6	Surr		4	8.2	4	16.8	1	26	1	7.6	MMB	8/7
EC01A Unacclimated /.	7	Surr		4	8.5	4	15.8	1	26	1	7.7	MMB	8/8
EC01A Unacclimated /.	8	Surr		4	8.5	4	15.5	1	26	1	8.0	BH	8/9
EC01A Unacclimated /.	9	Surr		4	8.5	4	15.3	1	26	1	8.0	BH	8/10
EC01A Unacclimated /.	10	Surr		4	8.5	4	15.7	1	27	1	7.8	CR	8/11
EC02A /.	0	Surr		4	8.2	4	15.3	1	28	1	8.0	BH	8/1/08
EC02A /.	1	Surr		4	8.4	4	14.7	1	28	1	7.9	TS	8/2
EC02A /.	2	Surr		4	8.4	4	15.0	1	28	1	8.0	TS	8/3
EC02A /.	3	Surr		4	8.5	4	15.3	1	28	1	8.0	BH	8/4
EC02A /.	4	Surr		4	8.1	4	15.6	1	28	1	8.4	MP	8/5
EC02A /.	5	Surr		4	8.8	4	15.9	1	28	1	8.1	BH	8/6
EC02A /.	6	Surr		4	8.4	4	15.7	1	28	1	8.1	MMB	8/7
EC02A /.	7	Surr		4	8.5	4	15.8	1	28	1	8.1	MMB	8/8
EC02A /.	8	Surr		4	8.5	4	15.7	1	28	1	8.1	BH	8/9
EC02A /.	9	Surr		4	8.6	4	15.2	1	28	1	8.1	BH	8/10
EC02A /.	10	Surr		4	8.4	4	15.3	1	28	1	8.2	CR	8/11

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: 6.14788 **Count:** 20 **-1s Warning Limit:** 4.53845 **-2s Action Limit:** 3.35035
Sigma: **CV:** 35.46% **+1s Warning Limit:** 8.32804 **+2s Action Limit:** 11.2813

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Mar	8	4.66335	-1.48452	-0.91055			15-5983-1973	01-8530-0758
2			8	5.13594	-1.01194	-0.59253			12-6238-5677	07-4588-5444
3		Jun	22	5.99057	-0.15731	-0.08540			17-1591-2461	05-4082-2230
4		Jul	26	4.50104	-1.64683	-1.02727	(-)		10-7443-1576	14-0796-2659
5		Aug	11	7.69040	1.54253	0.73756			16-1376-4953	18-3640-7612
6			30	3.67616	-2.47172	-1.69425	(-)		05-1254-4340	07-4470-1159
7		Sep	13	4.41009	-1.73779	-1.09453	(-)		10-9673-5864	09-7524-5460
8			22	6.78907	0.64119	0.32685			05-2196-6286	15-5008-9467
9			27	3.60821	-2.53967	-1.75571	(-)		14-2711-1162	15-3243-2698
10	2007	May	18	5.78633	-0.36154	-0.19968			10-9949-6658	01-0514-6184
11			22	5.32422	-0.82366	-0.47391			02-6215-7262	07-0555-3037
12		Jun	8	6.65260	0.50472	0.25995			08-1478-6281	07-1616-4889
13			12	5.57512	-0.57275	-0.32219			12-4873-2529	01-1576-1244
14		Jul	20	10.14752	3.99964	1.65103	(+)		03-1740-6698	15-0085-4047
15		Sep	17	7.52045	1.37257	0.66394			13-0115-1998	01-0589-8584
16		Oct	23	5.97296	-0.17492	-0.09510			06-8083-9702	00-5598-3388
17	2008	May	30	8.87317	2.72529	1.20890	(+)		13-3382-4100	20-7672-2429
18		Jun	27	8.83113	2.68326	1.19325	(+)		14-3368-4084	04-4152-2772
19		Jul	16	8.35797	2.21010	1.01182	(+)		09-4785-0917	05-8512-9332
20			26	8.84336	2.69549	1.19781	(+)		04-2285-3356	06-1210-3839
21		Aug	1	9.11399	2.96611	1.29712	(+)		16-8866-7768	08-6766-3207

CETIS Analysis Detail

Eohaustorius 10-d Survival and Reburial Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	16-8866-7768	16-8866-7768	04 Sep-08 3:20 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	19.73%

Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.87714	2.41651	0.3885	0.27997	Non-Significant Effect
		5	1.21086	2.41651	0.2672	0.27997	Non-Significant Effect
		10	5.51902	2.41651	0.0007	0.27997	Significant Effect

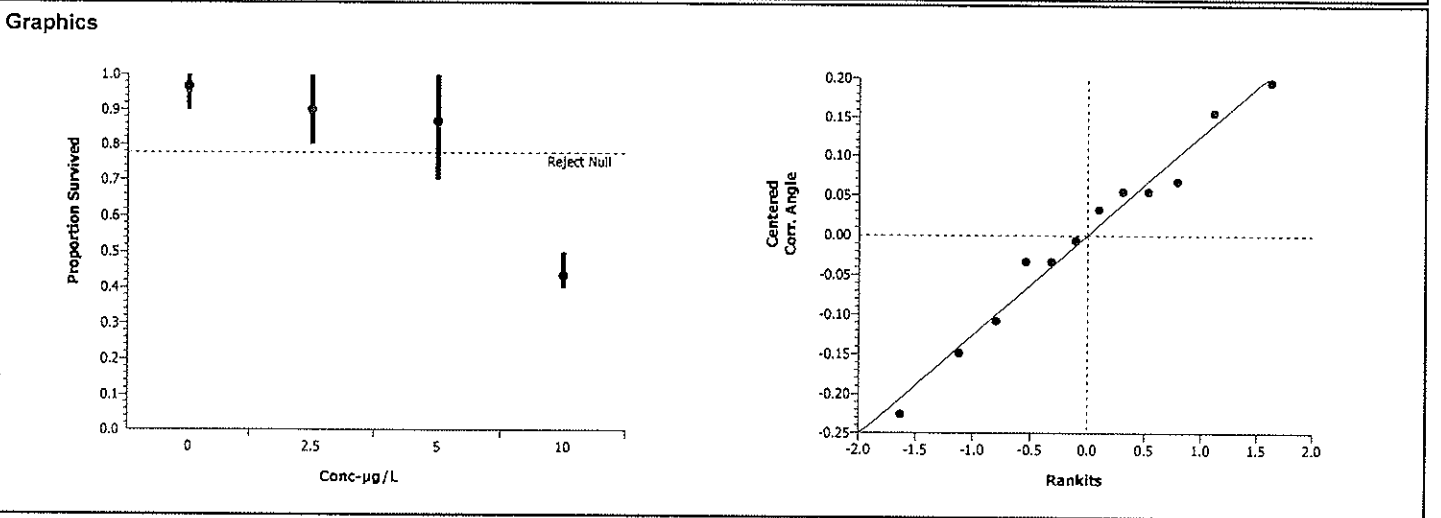
Test Acceptability				
Attribute	Statistic	TAC Range	Overlap	Decision
Control Response	0.96667	0.9 - NL	Yes	Passes acceptability criteria

ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	0.7340249	0.244675	3	12.15	0.00239	Significant Effect
Error	0.1610728	0.0201341	8			
Total	0.89509772	0.2648091	11			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	2.74217	11.34487	0.43311	Equal Variances
Distribution	Shapiro-Wilk W	0.97488		0.95465	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	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409	
2.5		3	0.90000	0.80000	1.00000	0.10000	1.25607	1.10715	1.41202	0.15256	
5		3	0.86667	0.70000	1.00000	0.15275	1.21741	0.99116	1.41202	0.21221	
10		3	0.43333	0.40000	0.50000	0.05774	0.71828	0.68472	0.78540	0.05813	

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							
2.5		0.90000	1.00000	0.80000							
5		1.00000	0.70000	0.90000							
10		0.50000	0.40000	0.40000							



CETIS Analysis Detail

Spearman-Karber: Page 1 of 1
 Report Date: 04 Sep-08 3:20 PM
 Analysis: 08-6766-3207

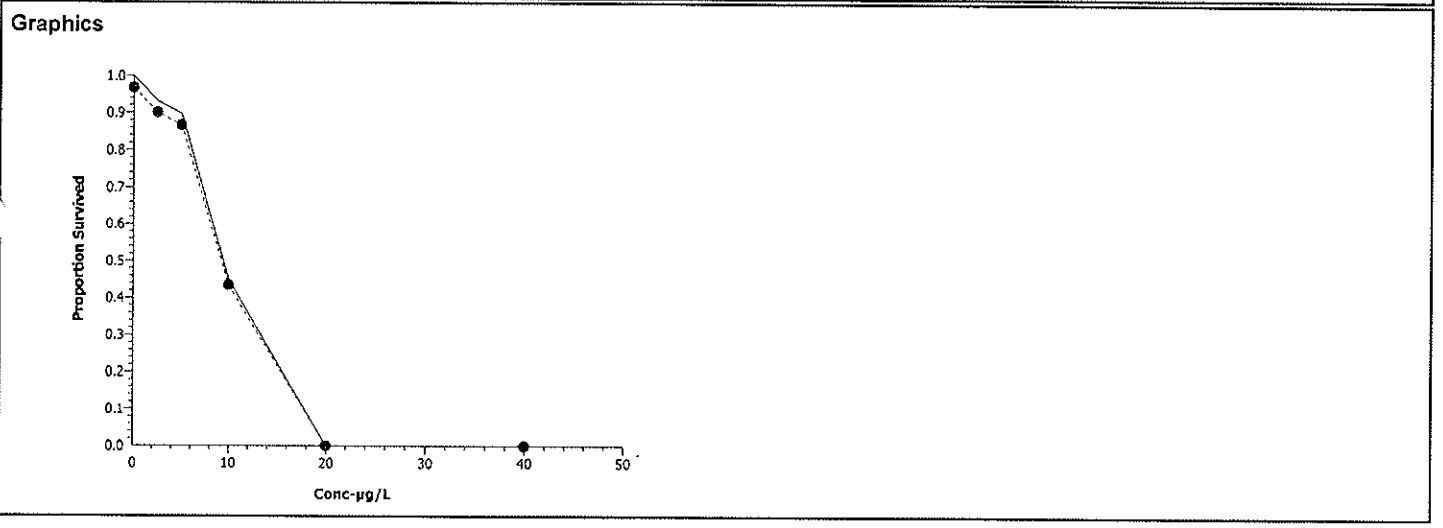
Eohaustorius 10-d Survival and Reburial Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Trimmed Spearman-Karber	16-8866-7768	16-8866-7768	04 Sep-08 3:20 PM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0.03333334	6.90%	0.9597083	0.03773375	9.11399	7.66021	10.84366

Test Acceptability				
Attribute	Statistic	TAC Range	Overlap	Decision
Control Response	0.96667	0.9 - NL	Yes	Passes acceptability criteria

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
2.5		3	0.90000	0.80000	1.00000	0.02041	0.10000	27	30
5		3	0.86667	0.70000	1.00000	0.03118	0.15275	26	30
10		3	0.43333	0.40000	0.50000	0.01179	0.05774	13	30
20		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30



Conc-µg/L	Code	Rep	Pos	# Exposed	# Survived	# Reburied
0	D	1	10	10	9	
0	D	2	17	10	10	
0	D	3	13	10	10	
2.5		1	18	10	9	
2.5		2	14	10	10	
2.5		3	5	10	8	
5		1	11	10	10	
5		2	1	10	7	
5		3	9	10	9	
10		1	7	10	5	
10		2	6	10	4	
10		3	16	10	4	
20		1	2	10	0	
20		2	3	10	0	
20		3	15	10	0	
40		1	4	10	0	
40		2	12	10	0	
40		3	8	10	0	





Cadmium Reference Toxicant Test Water Quality Data Sheet for Eohs

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860 TEST ID P080418.11	PROJECT Port Angeles PROJECT MANAGER B. Hester LOT #: 06510TC	SPECIES Eohaustorius estuarius QUANTITY OF STOCK : 6.0ml ACTUAL: 26-Jul-08 7/24/08-8/1/08	NEWFIELDS LABORATORY Port Gamble Bath 2 QUANTITY OF DILUENT: 1500ml ACTUAL: 1600 TEST END DATE 8/5/08 30-Jul-08 TIME 1500 TS
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WATER QUALITY DATA

DILUTIN. WAT. BATCH	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT			
		cadmium chloride		cadmium			
CLIENT/NEWFIELDS ID	CONCENTRATION	TEST CONDITIONS		TECHNICIAN			
		value	units	meter	unit		
Ref. Tox.-cadmium	10 mg/L	DO (mg/L)	≥ 5.0	SAL (ppt)	80 ± 0.5	JS	8/1/08
		TEMP. (C)	15 ± 1	meter	ppt		
		PH	7.9	meter	unit		
		TEMP. (C)	14.5	meter	unit		
		DO (mg/L)	7.1	meter	ppt		
Ref. Tox.-cadmium	20 mg/L	DO (mg/L)	7.4	SAL (ppt)	28	TS	8/2
		TEMP. (C)	14.8	meter	ppt		
		PH	7.6	meter	unit		
		TEMP. (C)	15.2	meter	unit		
		DO (mg/L)	7.2	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	7.9	SAL (ppt)	28	BH	8/3
		TEMP. (C)	15.3	meter	ppt		
		PH	7.9	meter	unit		
		TEMP. (C)	14.9	meter	unit		
		DO (mg/L)	7.6	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	7.9	SAL (ppt)	28	TS	8/4
		TEMP. (C)	15.5	meter	ppt		
		PH	7.8	meter	unit		
		TEMP. (C)	14.5	meter	unit		
		DO (mg/L)	7.0	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	7.7	SAL (ppt)	28	TS	8/1/08
		TEMP. (C)	14.8	meter	ppt		
		PH	7.7	meter	unit		
		TEMP. (C)	14.9	meter	unit		
		DO (mg/L)	7.4	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	7.8	SAL (ppt)	28	BH	8/4
		TEMP. (C)	15.3	meter	ppt		
		PH	7.9	meter	unit		
		TEMP. (C)	15.2	meter	unit		
		DO (mg/L)	8.0	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	7.0	SAL (ppt)	28	TS	8/5
		TEMP. (C)	14.4	meter	ppt		
		PH	7.9	meter	unit		
		TEMP. (C)	14.8	meter	unit		
		DO (mg/L)	7.6	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	7.7	SAL (ppt)	28	TS	8/2
		TEMP. (C)	14.8	meter	ppt		
		PH	7.6	meter	unit		
		TEMP. (C)	14.8	meter	unit		
		DO (mg/L)	8.0	meter	ppt		
Ref. Tox.-cadmium	40 mg/L	DO (mg/L)	NA	SAL (ppt)	28	TS	8/5
		TEMP. (C)	NA	meter	ppt		
		PH	NA	meter	unit		
		TEMP. (C)	NA	meter	unit		
		DO (mg/L)	NA	meter	ppt		

Cadmium Reference Toxicant Test Survival Data Sheet for Eohs



SPECIES <i>Eohaustorius estuarius</i>			
CLIENT Ecology & Environment	PROJECT Port Angeles	NEWFIELDS JOB NO. 1101-004-860	PROJECT MANAGER B. Hester
NEWFIELDS LABORATORY Port Gamble Bath 2		PROTOCOL PSEP 1995	

SURVIVAL & BEHAVIOR DATA

OBSERVATION KEY N = Normal LOE = Loss of equilibrium Q = Quiescent DC = Discoloration NB = No body F = Floating on surface				DATE 8/2			DATE 8/3			DATE 8/4			DATE 8/5			
				INITIAL # OF ORGANISMS 10			TECHNICIAN TS			TECHNICIAN TS			TECHNICIAN BHM			TECHNICIAN TS
CLIENT/ NEWFIELDS ID	CONC.		REP	INITIAL NUMBER	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
	value	units			#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
Ref.Tox.- cadmium	0 mg/L		1		9	1	3S	9	0	3S	9	0	2FOS	9	0	4S
			2		10	0	2S	10	0	N	10	0	1FOS	10	0	1S
			3		10	0	N	10	0	N	10	0	N	10	0	1S
Ref.Tox.- cadmium	2.5 mg/L		1		10	0	N	10	0	1S	9	1	1FOS	9	0	N
			2		10	0	4S	10	0	4S	10	0	2FOS	10	0	3S
			3		9	1	3S	9	0	2S	9	0	N	8	1	3S
Ref.Tox.- cadmium	5 mg/L		1		10	0	1S	10	0	N	10	0	1FOS 1Q	10	0	2S, Q
			2		8	2	N	8	0	N	8	0	Q	7	1	Q
			3		10	0	5S	10	0	4S	10	0	N	8	1	2S, Q
Ref.Tox.- cadmium	10 mg/L		1		10	0	4S	9	1	2S	8	1	1F/Q	5	3	15, Q
			2		10	0	2S	10	0	N	8	2	Q	4	4	15, Q
			3		10	0	3S	10	0	2S	9	1	1F/Q	4	5	Q
Ref.Tox.- cadmium	20 mg/L		1		9	1	Q	7	2	Q	5	2	Q	0	5	NA
			2		8	2	2S	7	1	15Q	4	3	1F/Q	0	4	↓
			3		10	0	1S	9	1	15Q	6	3	Q	0	6	↓
Ref.Tox.- cadmium	40 mg/L		1		7	3	3S	0	7	NA	—	—	—	—	—	—
			2		10	0	4S	0	4	Q	0	6	VL	—	—	—
			3		8	2	3S	2	6	Q	0	2	—	—	—	—

Q WC 8/5/08 TS



Cadmium Reference Toxicant Test Water Quality Data Sheet for Eohs

CLIENT Ecology & Environment <small>NEWFIELDS JOB NUMBER</small> 1101-004-860 TEST ID P080418.11	PROJECT Port Angeles <small>PROJECT MANAGER</small> B. Hester LOT #: 065107C	SPECIES Eohaustorius estuarius <small>QUANTITY OF STOCK : 6.0mL</small> ACTUAL: 6.01 <small>TEST START DATE</small> 26Jul08	NEWFIELDS LABORATORY Port Gamble Bath 2 <small>INIT</small> <small>QUANTITY OF DILUENT: 1500mL</small> ACTUAL: 1501.5 <small>DATE PREP</small> 30Jul08 <small>TEST END DATE</small> 1600h <small>TIME</small> 1500h
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WATER QUALITY DATA

DIL TIN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT								
		cadmium chloride	cadmium chloride	cadmium	cadmium							
FSW072608.01	NA	cadmium chloride		cadmium								
TEST CONDITIONS												
CLIENT/ NEWFIELDS ID	CONCENTRATION	OAY	REP	D.O.		TEMP. °C	SALINITY ppt	pH	TECHNICIAN	Date		
				value	units						meter	unit
Ref.Tox.-cadmium	0 mg/L	0	Stock	4	6.9	4	16.7	1	28	7.7	TS	8/1/08
		1	1	4	7.3	4	15.2	1	28	7.4	TS	8/2
		2	2	4	7.7	4	14.6	1	28	7.7	TS	8/3
		3	1	4	7.8	4	15.7	1	28	7.9	BH	8/4
		4	1	4	7.8	4	16.2	1	28	7.5	TS	8/5
Ref.Tox.-cadmium	2.5 mg/L	0	Stock	4	6.9	4	14.5	1	28	7.8	TS	8/1/08
		1	1	4	7.4	4	15.1	1	28	7.5	TS	8/2
		2	2	4	7.8	4	14.6	1	28	7.7	TS	8/3
		3	3	4	7.6	4	15.5	1	28	7.8	BH	8/4
		4	1	4	7.7	4	16.0	1	28	7.7	TS	8/5
Ref.Tox.-cadmium	5 mg/L	0	Stock	4	7.0	4	14.8	1	28	7.8	TS	8/1/08
		1	1	4	7.3	4	14.9	1	28	7.6	TS	8/2
		2	2	4	7.9	4	14.7	1	28	7.7	TS	8/3
		3	3	4	7.8	4	15.4	1	28	7.9	BH	8/4
		4	1	4	7.7	4	15.6	1	28	7.7	TS	8/5

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		Ecology & Environment		PROJECT		Port Angeles		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATORY		PROTOCOL		SPECIES			
								1101-004-860		B. Hester		Port Gamble Bath 6		PSEP 1985		Echistosorus estuarius			
INITIAL # OF ORGANISMS		DATE		TECHNICIAN		OBSERVNS		DATE		TECHNICIAN		OBSERVNS		DATE		TECHNICIAN		OBSERVNS	
20		8/6/08		PH		N		8/7/08		MMB		N		8/9/08		PH		N	
		8/15/08		MMB		N		8/19/08		PH		N		8/20/08		MMB		N	
		8/17/08		MMB		N		8/19/08		PH		N		8/20/08		MMB		N	
		8/19/08		MMB		N		8/20/08		CR		N		8/21/08		TS		N	
		8/20/08		MMB		N		8/21/08		CR		N		8/22/08		TS		N	
		8/21/08		MMB		N		8/22/08		CR		N		8/23/08		TS		N	
		8/22/08		MMB		N		8/23/08		CR		N		8/24/08		TS		N	
		8/23/08		MMB		N		8/24/08		CR		N		8/25/08		TS		N	
		8/24/08		MMB		N		8/25/08		CR		N		8/26/08		TS		N	
		8/25/08		MMB		N		8/26/08		CR		N		8/27/08		TS		N	
		8/26/08		MMB		N		8/27/08		CR		N		8/28/08		TS		N	
		8/27/08		MMB		N		8/28/08		CR		N		8/29/08		TS		N	
		8/28/08		MMB		N		8/29/08		CR		N		8/30/08		TS		N	
		8/29/08		MMB		N		8/30/08		CR		N		8/31/08		TS		N	
Control /		1	22																
RF01A /		1	29																
RF02A /		1	36																
RF03A /		1	28																

+ lots o' bacteria

IM

+ warm

+ warm

① WC, MMB 8/7/08

10-DAY SOLID PHASE TEST OBSERVATION DATA



CLIENT		PROJECT		NEWFIELDS JOB NO.		PROJECT MAN.		NEWFIELDS LABORATOR/PROTOCOL		SPECIES							
Ecology & Environment		Port Angeles		1101-004-860		B. Heister		Port Gamble Bath 6 PSEP 1995		Echinostorius estuarius							
INITIAL # OF ORGANISMS		END-POINT DATA & OBSERVATIONS															
20		DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	DATE	TECHNICIAN	NUMBER ALIVE			
ED04A / .	1	8/6/08	BHC	8/7/08	MMB	8/8/08	MMB	8/9/08	BK	8/10/08	MMB	8/12/08	CR	8/13/08	TS	8/15	20
	2			14E		12M		13M		10M		16M,G		13M,G			20
	3			14E		12E		6E, 3M		8M		6M,G		5M,G			20
	4			14E		8M, 3E		9M		10M		9M,G		9M,G			20
	5			10E		13M		14M		12M		9M,G		13M,G			20
IH05A / .	1			12E		7M, 3E		7M, 2E		8M		5M,G		9M,G			20
	2			N		N		N		N		N		N			20
	3			1E													20
	4			N													20
	5																20



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eohs Retest	NewFields Test ID: 1101-004-860	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:	
8/12/08	20.5	

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	8/12/08 MMB	20.5	21.5	8/12/08 MMB	N	X	X	0.001 ^①
RF01A	Surr	↓	20.5	↓	↓	↓			0.004
RF02A	Surr	↓	1.95	↓	↓	↓			0.001
RF03A	Surr	↓	2.40	↓	↓	↓			0.004
ED04A	Surr	8/5/08 BH	3.46	↓	↓	Y			0.065
IH05A	Surr	↓	20.5	↓	↓	↓			0.016

① Values applicable; stray mark MMB 8/12/08



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Eohs Retest	NewFields Test ID: 1101-004-860	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:	
8/12/08	20.5	

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	8/12/08 MMB	4.5	21.5	8/12/08 MMB	N	7.8	28	0.010
RF01A	Surr		4.5	↓	↓	↓	7.5	28	0.085
RF02A	Surr		1.85	↓	↓	↓	7.3	29	0.071
RF03A	Surr		1.78	↓	↓	↓	7.5	29	0.030
ED04A	Surr	8/5/08 BH	27.5	↓	↓	Y	7.2	32	0.197 ⁸¹
IH05A	Surr	↓	3.80	↓	↓	↓	7.3	29	0.197 ⁸¹ -810 ^{BH}

① Calc. after dilution 250 μl in 25ml BH



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&EPA	Organism: Eohs - Perun	NewFields Test ID:	Test Duration (days): 10d
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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:	
8/15/08	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
∅	Surr	TS 8/15/08	<0.5	19.0	TS 8/15/08	N	NA → 7		0.001
RF01	↓	↓	<0.5	↓	↓	↓			0.001
RF02	↓	↓	0.972	↓	↓	↓		0.005	
RF03	↓	↓	2.12	↓	↓	↓		0.032	
ED04	↓	↓	18.0	↓	↓	↓		0.006	
IH05	↓	↓	3.35	↓	↓	↓		0.007	



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E PA	Organism: E. coli - Zerna	NewFields Test ID:	Test Duration (days):
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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 +1°C of standards temperature at time and date of analysis.
Date:	Temperature:	
8/15/08	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	Surr	TS 8/15/08	<0.5	19.0	TS 8/15/08	N	7.8	27	0.019
RF01	↓	↓	<0.5	↓	↓	↓	7.5	27	0.362
RF02	↓	↓	1.15	↓	↓	↓	7.5	27	0.362
RF03	↓	↓	3.40	↓	↓	↓	7.6	27	0.150
ED04	↓	↓	25.1	↓	↓	↓	7.7	28	227.50
1H05	↓	↓	4.89	↓	↓	↓	7.6	27	0.84



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	TEST SPECIES <i>Eohaustorius estuarius</i>
	NEWFIELDS LABORATORY Port Gamble/Bath 6		TEMP. RECD./HOB#	TEST START DATE 5-Aug-2008
				TEST END DATE 15-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
Control /	0	Surr	12	4	8.3	4	15.5	1	28	1	7.9	TS	8/5
Control /	1	Surr	12	4	8.4	4	15.4	1	28	1	7.9	BH	8/6
Control /	2	Surr	12	4	8.4	4	15.6	1	28	1	7.9	MMB	8/7
Control /	3	Surr	12	4	8.5	4	15.6	1	28	1	7.9	MMB	8/8
Control /	4	Surr	12	4	8.5	4	15.3	1	28	1	8.1	BH	8/9
Control /	5	Surr	12	4	8.4	4	15.5	1	28	1	8.1	BH	8/10
Control /	6	Surr	12	4	8.4	4	15.2	1	29	1	8.1	CR	8/11
Control /	7	Surr	12	4	8.2	4	15.4	1	29	1	8.0	CR	8/12
Control /	8	Surr	12	4	8.4	4	15.8	1	29	1	8.0	MMB	8/13
Control /	9	Surr	12	4	8.4	4	15.5	1	29	1	8.0	TS	8/14
Control /	10	Surr	12	4	8.5	4	15.2	1	29	1	8.0	BH	8/15
RF01A /	0	Surr	11	4	8.3	4	15.5	1	28	1	7.8	TS	8/5
RF01A /	1	Surr	11	4	8.3	4	15.4	1	28	1	7.8	BH	8/6
RF01A /	2	Surr	11	4	8.3	4	15.6	1	28	1	7.9	MMB	8/7
RF01A /	3	Surr	11	4	8.4	4	15.6	1	28	1	7.9	MMB	8/8
RF01A /	4	Surr	11	4	8.4	4	15.3	1	28	1	8.0	BH	8/9
RF01A /	5	Surr	11	4	8.4	4	15.2	1	28	1	8.0	BH	8/10
RF01A /	6	Surr	11	4	8.3	4	15.3	1	28	1	8.1	CR	8/11
RF01A /	7	Surr	11	4	8.4	4	15.3	1	28	1	8.0	CR	8/12
RF01A /	8	Surr	11	4	8.3	4	15.9	1	28	1	8.0	MMB	8/13
RF01A /	9	Surr	11	4	8.3	4	15.6	1	28	1	8.0	TS	8/14
RF01A /	10	Surr	11	4	8.6	4	15.2	1	28	1	8.1	BH	8/15



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME 1530 /	DILUTION WATER BATCH FSW080408.01	TEST SPECIES <i>Eohaustorius estuarius</i>
NEWFIELDS JOB NUMBER	NEWFIELDS LABORATORY Port Gamble/Bath 6	TEMP. RECDR./HOB#	TEST START DATE 5-Aug-2008	TEST END DATE 15-Aug-2008

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				meter	>5.0	meter	°C	meter	ppt	meter	pH		
RF02A /.	0	Surr	7	4	8.1	4	15.9	1	28	1	7.7	TS	8/5
RF02A /.	1	Surr	7	4	8.0	4	15.8	1	28	1	7.7	BH	8/6
RF02A /.	2	Surr	7	4	8.1	4	15.7	1	28	1	7.9	MMB	8/7
RF02A /.	3	Surr	7	4	8.3	4	15.6	1	28	1	7.6	MMB	8/8
RF02A /.	4	Surr	7	4	8.3	4	15.1	1	28	1	8.0	BH	8/9
RF02A /.	5	Surr	7	4	8.4	4	15.4	1	28	1	7.9	BH	8/10
RF02A /.	6	Surr	7	4	8.2	4	15.4	1	28	1	8.0	CR	8/11
RF02A /.	7	Surr	7	4	8.5	4	15.2	1	29	1	8.0	CR	8/12
RF02A /.	8	Surr	7	4	8.0	4	16.2	1	28	1	7.5	MMB	8/13
RF02A /.	9	Surr	7	4	8.0	4	16.0	1	28	1	7.9	TS	8/14
RF02A /.	10	Surr	7	4	8.5	4	15.1	1	28	1	8.0	BH	8/15
RF03A /.	0	Surr	10	4	8.0	4	15.5	1	28	1	7.7	TS	8/5
RF03A /.	1	Surr	10	4	8.0	4	15.5	1	28	1	7.7	BH	8/6
RF03A /.	2	Surr	10	4	7.9	4	15.7	1	28	1	7.9	MMB	8/7
RF03A /.	3	Surr	10	4	8.3	4	15.7	1	28	1	7.8	MMB	8/8
RF03A /.	4	Surr	10	4	8.3	4	15.2	1	28	1	8.0	BH	8/9
RF03A /.	5	Surr	10	4	8.2	4	15.5	1	28	1	8.0	BH	8/10
RF03A /.	6	Surr	10	4	8.3	4	15.3	1	29	1	8.1	CR	8/11
RF03A /.	7	Surr	10	4	8.4	4	15.2	1	29	1	8.1	CR	8/12
RF03A /.	8	Surr	10	4	8.2	4	15.8	1	29	1	7.9	MMB	8/13
RF03A /.	9	Surr	10	4	8.2	4	15.6	1	29	1	8.1	TS	8/14
RF03A /.	10	Surr	10	4	8.4	4	15.2	1	29	1	8.2	BH	8/15



10 DAY SOLID PHASE TEST WATER QUALITY DATA

CLIENT Ecology & Environment NEWFIELDS JOB NUMBER 1101-004-860	PROJECT Port Angeles PROJECT MANAGER B. Hester	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	TEST SPECIES <i>Eohaustorius estuarius</i>
	NEWFIELDS LABORATORY Port Gamble/Bath 6		TEMP. RECDR./HOB0#	TEST START DATE 5-Aug-2008
				TEST END DATE 15-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR #	DO (mg/L)		Temp °C		SALINITY (ppt)		pH (pH units)		TECH.	Initials & Date
				>5.0		15 ± 1		28 ± 1		7.8 ± 0.5			
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH		
ED04A/.	0	Surr	20	4	7.1	4	16.0	1	28	1	7.9	TS	8/5
ED04A/.	1	Surr	20	4	7.8	4	15.7	1	28	1	8.0	BH	8/6
ED04A/.	2	Surr	20	4	8.1	4	15.9	1	28	1	8.1	MMS	8/7
ED04A/.	3	Surr	20	4	8.3	4	16.2	1	28	1	8.2	MMS	8/8
ED04A/.	4	Surr	20	4	5.1	4	15.9	1	28	1	8.2	BH	8/9
ED04A/.	5	Surr	20	4	7.6	4	15.5	1	28	1	8.2	BH	8/10
ED04A/.	6	Surr	20	4	7.8	4	15.3	1	29	1	8.2	CR	8/11
ED04A/.	7	Surr	20	4	7.8	4	15.5	1	29	1	8.3	CR	8/12
ED04A/.	8	Surr	20	4	7.8	4	15.8	1	29	1	8.3	MMS	8/13
ED04A/.	9	Surr	20	4	8.0	4	15.4	1	29	1	8.3	TS	8/14
ED04A/.	10	Surr	20	4	8.1	4	15.3	1	29	1	8.4	BH	8/15
IH05A/.	0	Surr	35	4	7.9	4	15.7	1	28	1	7.9	TS	8/5
IH05A/.	1	Surr	35	4	8.1	4	15.4	1	28	1	7.9	BH	8/6
IH05A/.	2	Surr	35	4	8.1	4	15.8	1	28	1	7.9	MMS	8/7
IH05A/.	3	Surr	35	4	8.2	4	15.7	1	28	1	7.9	MMS	8/8
IH05A/.	4	Surr	35	4	7.5	4	15.5	1	28	1	8.0	BH	8/9
IH05A/.	5	Surr	35	4	7.5	4	15.2	1	28	1	8.1	BH	8/10
IH05A/.	6	Surr	35	4	8.2	4	15.2	1	29	1	8.1	CR	8/11
IH05A/.	7	Surr	35	4	8.2	4	15.3	1	29	1	8.2	CR	8/12
IH05A/.	8	Surr	35	4	8.1	4	15.9	1	29	1	8.1	MMS	8/13
IH05A/.	9	Surr	35	4	8.2	4	15.4	1	29	1	8.2	TS	8/14
IH05A/.	10	Surr	35	4	8.3	4	15.3	1	29	1	8.2	BH	8/15

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

APPENDIX B

LABORATORY DOCUMENTS

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

POLYCHAETE TESTS

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

NEWFIELDS

CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES																			
Ecology & Environment		Port Angeles		0		0		Port Gambale Room 1					PSEP 1995		Neanthes arenaceodentata																			
CLIENT NEWFIELD ID		REP	JAR	INITIALS	DATE AND INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)						
Control /	1	137																																
	2	157																																
	3	69																																
	4	34																																
	5	78																																
RF01A /	1	26																																
	2	85																																
	3	149																																
	4	29																																
	5	100																																
RF02A /	1	18																																
	2	141																																
	3	179																																
	4	1																																
	5	102																																

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES											
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Neanthes arenaceodentata											
CLIENT NEWFIELD ID		REF	JAR	ENDPOINT DATA & OBSERVATIONS													TARE WEIGHT (mg)	TOTAL WEIGHT (mg)								
RF03A /	1	83		6/28	6/29	6/30	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	20	130.07	206.62	
	2	30																							148.34	225.11
	3	161																							130.69	133.16
	4	118																							121.90	185.87
	5	159																							130.02	198.62
BA01A /	1	52		6/28	6/29	6/30	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17			119.50	204.78
	2	94																							159.37	255.24
	3	108																							143.19	209.32
	4	176																							152.14	243.07
	5	56																							108.59	159.83
EH02A /	1	117		6/28	6/29	6/30	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17			151.31	220.89
	2	50																							145.09	227.24
	3	196																							126.08	171.52
	4	123																							125.85	109.84
	5	76																							119.81	196.81

① Found another worm species of a crab in Sample 7/17/08 75

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES								
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Neanthes arenaceodentata								
CLIENT/NEWFIELDS ID		REP	JAR	ENDPOINT DATA & OBSERVATIONS												NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)					
FP01A /	1	167		6/28	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	20	139.51	210.35
	2	131		TS	CR	CR	BA	BA	MMB	MMB	CR	CR	CR	CR	CR	CR	CR	TS	MMB	TS	20	132.46	178.71
	3	169										F, IS	F	F	F	F	F	F	F	F	5	122.82	153.87
	4	171										F	F	F	F	F	F	F	F	F	5	139.13	213.32
	5	125										F	F	F	F	F	F	F	F	F	4	135.81	191.08
IE03A /	1	49																			5	133.06	192.27
	2	8																			5	131.41	199.79
	3	23																			2	132.69	175.50
	4	66																			5	134.22	190.61
	5	36																			5	153.24	240.11
IE04A /	1	105																			4	141.62	200.70
	2	115																			5	147.19	593.00
	3	42																			5	134.64	210.60
	4	61																			4	124.13	189.57
	5	45																			5	118.68	185.77

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

NEWFIELDS

CLIENT	Ecology & Environment		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					SPECIES													
	Port Angeles		Port Angeles		0		0		Port Gamble Room 1					Nematodes arenaceodenitata													
ENDPOINT DATA & OBSERVATIONS										PSEP 1995		NUMBER REMAINING		TARE WEIGHT (mg)		TOTAL WEIGHT (mg)											
CLIENT/NEWFIELD ID	REP	JAR	INITIALS	DATE AND INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
	IE06A /	1	31			N	N	F _U	N	U	U,F	F	N	F	F		N	N	N	N	N	N	A	A,W	A	4	122.91
2		143					U	U	F _U	M	N	N	N	N		N	N	N	N	N	N	N	N	N	5	120.43	177.33
3		81					U	U	F _U		F	N	F _U	F _U		F	F	F _U	F	F	F	F	F	F	4	113.11	175.74
4		75					U	U	F _U		N	N	N	N		N	N	N	N	N	N	N	N	N	5	111.48	172.2
5		37						U	U	U		N	N	N		N	N	N	N	N	N	A	A	A	5	107.74	187.26
IE14A /	1	20					U	U	F _U	F	F	F	F	F		F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	5	113.36	171.20
	2	173					U	U	F _U	F	F	F	F	F		F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	5	106.72	185.39
	3	47					U	U	F _U	F	F	F	F	F		F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	5	118.18	188.08
	4	22					U	U	F _U	F	F	F	F	F		F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	5	132.26	171.85
	5	12					U	U	F _U	F	F	F	F	F		F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	F _U	5	123.19	187.08
MA06A /	1	133					U	U	N	N	N	N	N	N		N	N	N	N	N	N	N	N	N	5	125.58	201.95
	2	132					N	N	U	F	F	F	F	F		N	N	N	N	N	N	N	N	N	5	115.80	190.64
	3	101					N	N	U	F	F	F	F	F		N	N	N	N	N	N	N	N	N	4	116.53	198.50
	4	148					U	U	U	N	N	N	N	N		N	N	N	N	N	N	N	N	N	5	116.74	199.26
	5	4					U	U	U	N	N	N	N	N		N	N	N	N	N	N	N	N	N	5	125.58	194.83

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					SPECIES												
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					Nearthres arenaceoderiata												
#S= Number on the Surface #M= Number of Mortality L=Anoxic Surface F=Fungal Patches A=Algal Patches D=No Air Flow (DOT?) U=Excess food N=Normal B=No Burrows		Date and Initials		ENDPOINT DATA & OBSERVATIONS										TARE WEIGHT (mg)	TOTAL WEIGHT (mg)										
CLIENT/NEWFIELD ID	REP	JAR	INITIAL #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
MA05A /	1	5		N	N	N	N	N	N	N	N	N	N	N	N	F ₁₅	F	F	N	N	N	N	N	125.48	175.52
	2	120		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	120.18	157.46
	3	57		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	112.77	177.01
	4	26		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	119.55	193.42
	5	41		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	112.40	166.76
MA02A /	1	55		F	F	F	F	F	F	F	F	F	F	F	F	A	F	F	A	A	A	A	A	123.49	155.50
	2	119		F	F	F	F	F	F	F	F	F	F	F	F	A	A	A	A	A	A	A	A	135.44	157.76
	3	73		F	F	F	F	F	F	F	F	F	F	F	F	A	A	A	A	A	A	A	A	115.87	164.01
	4	71		F	F	F	F	F	F	F	F	F	F	F	F	A	A	A	A	A	A	A	A	118.66	169.83
	5	53		F	F	F	F	F	F	F	F	F	F	F	F	A	A	A	A	A	A	A	A	128.99	176.51
IE15A /	1	168		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	123.46	216.36
	2	99		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	133.02	174.08
	3	177		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	113.93	196.37
	4	6		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	120.74	190.01
	5	152		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	115.70	187.47

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES												
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Nearfthes arenaceodentata												
CLIENT/NEWFIELDS		DATE AND INITIALS		ENDPOINT DATA & OBSERVATIONS																							
REP	JAR	INITIALS		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
OH02A /		1	35		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	A	5	116.38	175.48		
		2	158		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	124.83	166.58	
		3	88		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	139.78	202.31
		4	112		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	127.41	220.50
		5	65		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	130.59	187.73
FT11A /		1	136		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	F	F	4	131.13	168.04		
		2	32		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	132.10	202.33	
		3	7		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	106.44	168.50	
		4	170		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	116.45	179.69	
		5	178		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	121.36	168.14	
FT06A /		1	58		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	A	5	121.30	185.78		
		2	142		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	120.31	160.68	
		3	77		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	111.41	159.30	
		4	46		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	A	5	116.46	141.04	
		5	39		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	A	A	5	118.48	181.82	

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES													
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Nearthes arenaceoderivata													
CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES													
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Nearthes arenaceoderivata													
CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES													
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Nearthes arenaceoderivata													
#S- Number on the Surface #A- Number of Mortality L- Anoxic Surface F- Fungal Patches A- Algal Patches D- No Air Flow (DOT) U- Excess Food N- Normal B- No Burrows	KPO6A /	REP	JAR	INTIALS	DATE	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	7/18	7/19	7/20	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)	
		1	48			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	112.93	1842.6
		2	3			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	119.43	174.52
		3	172			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	116.35	197.09
		4	122			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	126.72	187.47
	5	127			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	110.24	177.41	
	KPO5A /	1	25			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	106.61	157.40
		2	165			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	121.87	184.06
		3	60			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	105.68	181.89
		4	62			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	106.53	176.29
		5	150			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	130.04	203.71
	BL06A /	1	17			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	114.52	170.31
		2	82			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	119.24	167.63
		3	126			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	118.41	167.77
		4	13			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	111.51	156.65
5		108			N	N	N	N	N	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	109.88	172.89	

PWC CR 7/14

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES												
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Neanthes arenaceodentata												
CLIENT/NEWFIELDS ID		REP	JAR	ENDPOINT DATA & OBSERVATIONS												TARE WEIGHT (mg)	TOTAL WEIGHT (mg)										
INITIALS																											
BL04A /	1	174		6/28	6/29	6/30	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	20	147.35	207.01	
	2	88																								138.93	183.37
	3	54																								133.52	189.22
	4	153																								145.12	201.56
	5	116																								140.27	214.53
BL03A /	1	166		6/28	6/29	6/30	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	20	137.53	186.18	
	2	70																								136.91	194.11
	3	16																								140.02	193.04
	4	14																								137.40	188.26
	5	15																								113.45	152.81
BL02A /	1	129		6/28	6/29	6/30	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	20	121.23	212.93	
	2	147																								114.99	186.05
	3	59																								134.34	193.76
	4	67																								123.71	190.67
	5	19																								114.23	183.17

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

NEWFIELDS

CLIENT Ecology & Environment	PROJECT Port Angeles		JOB NO. 0		PROJECT MANAGER 0		NEWFIELDS LABORATORY Port Gamble Room 1					PROTOCOL PSEP 1995		SPECIES <i>Neanthes arenaceodentata</i>			
	INITIALS	DATE	REP	JMS	INITIALS	DATE	REP	JMS	INITIALS	DATE	REP	JMS	INITIALS	DATE	REP	JMS	
EIO2A /	1	24	1	24	N	7/1	CR	TS	7/1	N	7/10	CR	MMB	7/10	A	117.30	181.12
	2	80	2	80	N	7/2	CR	TS	7/2	N	7/11	CR	MMB	7/11	N	124.94	214.59
	3	134	3	134	N	7/3	CR	TS	7/3	N	7/12	CR	TS	7/12	N	135.71	215.27
	4	72	4	72	N	7/4	CR	TS	7/4	N	7/13	CR	TS	7/13	N	124.34	207.33
	5	162	5	162	N	7/5	CR	TS	7/5	N	7/14	CR	TS	7/14	N	112.03	174.73
FT01A /	1	86	1	86	N	7/6	CR	TS	7/6	N	7/15	CR	TS	7/15	N	130.25	194.73
	2	92	2	92	N	7/7	CR	TS	7/7	N	7/16	CR	TS	7/16	N	135.12	211.94
	3	146	3	146	N	7/8	CR	TS	7/8	N	7/17	CR	TS	7/17	N	130.40	204.15
	4	114	4	114	N	7/9	CR	TS	7/9	N	7/18	CR	TS	7/18	N	140.17	199.87
	5	110	5	110	N	7/10	CR	TS	7/10	N	7/19	CR	TS	7/19	N	122.64	183.13
FT04A /	1	33	1	33	N	7/11	CR	TS	7/11	N	7/20	CR	TS	7/20	N	141.81	199.50
	2	91	2	91	N	7/12	CR	TS	7/12	N	7/21	CR	TS	7/21	N	140.61	231.24
	3	21	3	21	N	7/13	CR	TS	7/13	N	7/22	CR	TS	7/22	N	154.37	24.35
	4	63	4	63	N	7/14	CR	TS	7/14	N	7/23	CR	TS	7/23	N	127.07	218.60
	5	145	5	145	N	7/15	CR	TS	7/15	N	7/24	CR	TS	7/24	N	134.82	209.74

ENDPOINT DATA & OBSERVATIONS

#S- Number on the Surface
#M- Number of Mortality
L-Anoxic Surface
F-Fungal Patches
A-Algal Patches
D-No Air Flow (D0?)
U-Excess food
N-Normal
B-No Burrows

INITIALS OF ORGANISM
S

WVC CR 7/11

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

NEWFIELDS

CLIENT		Ecology & Environment		PROJECT		Port Angeles		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES								
								0		0		Port Gamble Room 1					PSEP 1995		Neanthes arenaceodentata								
#S- Number on the Surface				Date and Initials				ENDPOINT DATA & OBSERVATIONS																			
CLIENT/NEWFIELDS ID	REP	JMS	INITIALS																								
				INITIAL OF ORGANISM 9																							
IE09A /	1	44		6/28	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	7/18	7/19	7/20	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)	
	2	51																									
	3	140																									
	4	128																									
	5	163																									
IH01A /	1	64																									
	2	180																									
	3	9																									
	4	151																									
	5	74																									
IH02A /	1	135																									
	2	97																									
	3	40																									
	4	43																									
	5	90																									

OV



Ammonia Analysis
Total Ammonia (mg/L)

Client/Project: E+E/Port Angeles	Organism: Neanthes	NewFields Test ID:	Test Duration (days): 20
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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:	
6/27/08	19.0°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	summ.	6/27/08 CR	0.00	20.0	6/27/08 CR	N			0.000
RF01A			0.00						0.008
RF02A			0.522						0.014
RF03A			1.32						0.009
BA01A			1.06						0.021
BLO2A			0.885						0.012
BLO3A			2.13						0.009
BLO4A			0.253						0.038
BLO6A			1.32						0.018
FP01A			0.865						0.024
EHO2A			1.22						0.034
EIO2A			0.320						0.017
FT01A			0.0455						0.022
FT04A			0.289						0.029
FT06A			0.718						0.027
FT11A			0.348						0.018

OV

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
IHO1A	SW07	6/27/08 CR	0.00	20.0	6/27/08 CR	N			0.794
IHO2A			0.00						0.071
IE03A			0.304						0.050
IE04A			0.401						0.016
IE06A			0.515						0.063
IE09A			0.00						0.031
IE14A			0.481						0.056
IE15A			0.643						0.050
KP05A			1.22						0.021
KP06A			0.362						0.021
MA02A			0.00						0.067
MA05A			0.380						0.040
MA06A			0.357						0.015
OHO2A	↓	↓	0.357	↓	↓	↓			0.093



**Ammonia Analysis
Total Ammonia (mg/L)**

Client/Project: E+E/Port Angeles	Organism: Neanthes	NewFields Test ID:	Test Duration (days): 20
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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:	
6/27/08	19.0°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	Surv.	6/27/08 CR	0.00	21.0	6/27/08 CR	N	7.4	28	
RFO1A	↓	↓	0.169	↓	↓		7.4	30	
RFO2A			2.75				7.4	30	
RFO3A			1.94				7.4	29	
BA01A			4.84				7.4	30	
BL02A			2.18				7.4	30	
BL03A			3.88				7.5	30	
BL04A			1.70				7.5	30	
BL06A			3.44				7.4	30	
FPO1A			3.40				7.5	30	
EH02A			7.30				7.5	30	
EIO2A			2.62				7.6	30	
FT01A			1.17				7.6	30	
FT04A			2.51				7.3	30	
FT06A			3.63				7.5	30	
FT11A			2.83				7.4	30	

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
IHo1A	SW07	6/27/08 CR	0.566	21.0	6/27/08 CR	N	7.4	30	
IHo2A			0.789				7.6	30	
IE03A			2.10				7.6	30	
IE04A			2.26				7.6	30	
IE06A			3.43				7.4	31	
IE09A			1.14				7.2	30	
IE14A			4.07				7.9	32	
IE15A			4.40				7.7	32	
KP05A			2.84				7.6	30	
KP06A			2.00				7.6	30	
MA02A			0.684				7.8	30	
MA05A			2.22				7.8	26	
MA06A			2.64				7.7	30	
OHO2A	↓	↓	2.50	↓	↓	↓	7.6	30	

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E+E/Port Angeles	Organism: Neanthes	NewFields Test ID:	Test Duration (days): 20
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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:	
6/27/08	19.0°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	Surv.	6/27/08 CR						0.031	
RFO1A	↓	↓							0.083
RFO2A									0.191
RFO3A									0.085
BA01A									0.054
BLO2A									0.728
BLO3A									0.101
BLO4A									0.342
BLO6A									0.044
FPO1A									0.262
EHO2A									0.794
EIO2A									0.288
FT01A									0.079
FT04A									0.318
FT06A									0.041
FT11A							0.118		

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
IHO1A	SW07	6/27/08 CR			6/27/08 CR	N			6.00
IHO2A									0.070
IE03A									0.108
IE04A									0.106
IE06A									3.58
IE09A									1.414
IE14A									0.060
IE15A									0.068
KPO5A									0.046
KPO6A									0.032
MA02A									15.2
MA05A									0.069
MA06A									0.041
OHO2A									0.202



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Neanthes, Batch 1	NewFields Test ID: 1101-004-860	Test Duration (days): 20
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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:	
7/18/08	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
Control	Surr.	7/18/08 J	<0.5	20.0	7/18/08 CR	N	NA → 7		0.005
RF01A	Surr.	↓	<0.5	↓	↓	↓	↓	↓	0.003
RF02A	Surr.		<0.5						0.010
RF03A	Surr.		<0.5						0.020
BA01A	Surr.		<0.5						0.003
EH02A	Surr.		<0.5						0.002
FP01A	Surr.		<0.5						0.000
IE03A	Surr.		<0.5						0.001
IE04A	Surr.		<0.5						0.006
IE06A	Surr.		<0.5						0.007
IE14A	Surr.		<0.5						0.019
MA06A	Surr.		<0.5						0.003
MA05A	Surr.		<0.5						0.002
MA02A	Surr.		<0.5						0.002
IE15A	Surr.		<0.5						0.005
OH02A	Surr.		<0.5						0.004

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Neanthes, Batch 1	NewFields Test ID: 1101-004-860	Test Duration (days): 20
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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:	
7/18/08	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
Control	Surr.	JW 7/18/08	<0.5	20.0	TS 7/18/08	N	7.4	27	0.028
RF01A	Surr.		<0.5				7.4	28	0.027
RF02A	Surr.		<0.5				7.4	27	0.015
RF03A	Surr.		<0.5				7.4	27	0.018
BA01A	Surr.		<0.5				7.3	27	0.018
EH02A	Surr.		0.305				7.0	28	
FP01A	Surr.		∅				7.1	28	
IE03A	Surr.		<0.5				7.1	28	0.104
IE04A	Surr.		<0.5				7.1	27	0.024
IE06A	Surr.		0.933				7.0	28	0.047
IE14A	Surr.		<0.5				7.1	27	0.018
MA06A	Surr.		<0.5				7.0	27	0.116
MA05A	Surr.		0.512				7.1	28	0.063
MA02A	Surr.		<0.5				7.0	28	0.132
IE15A	Surr.		<0.5				7.1	27	0.062
OH02A	Surr.		0.0498				6.8	27	0.223

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				
FT11A	Surr.	SW 7/18/08	0.405	20.0	TS 7/18/08	N	7.0	27	0.075				
FT06A	Surr.	↓	<0.5	↓	↓	↓	7.1	28	0.016				
KP06A	Surr.		∅				7.0	27	0.057				
KP05A	Surr.		0.0269 ① ∅				6.9	27	0.106				
BL06A	Surr.		∅				7.0	27	0.394				
BL04A	Surr.		0.843				6.9	26	0.580				
BL03A	Surr.		0.254				7.0	27	0.077				
BL02A	Surr.		0.311				7.1	27	0.474				
EI02A	Surr.		0.0339				7.0	27	0.306				
FT01A	Surr.		∅				7.1	28	0.111				
FT04A	Surr.		0.558				7.1	26	0.240				
IE09A	Surr.		0.208				7.2	27	0.077				
IH01A	Surr.		∅				7.2	27	0.187				
IH02A	Surr.		0.762				7.1	27	0.312				

① WE 7/18/08 TS

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS		WATER QUALITY DATA										DO (mg/L) >6.0	TEMP (C) 20 ± 1	SALINITY (ppt) 28 ± 1		pH 8.0 ± 1.0		WATER RENEWAL	Feeding	TECH/DATE
	DAY	REP	JAR	meter	meter	meter	meter	meter	meter	meter	meter	meter			meter	meter	meter				
	DO	D.O.	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP			TEMP	TEMP					
Control /	0	Surr	95	4	7.5	4	19.2	R	29	1	8.0							MMB 6/27/08			
Control /	1	Surr	95	4	7.6	4	20.0	R	29	1	8.1							TS 6/28			
Control /	2	Surr	95	4	7.7	4	20.0	R	29	1	7.9							TS 6/29			
Control /	3	Surr	95	4	7.6	4	19.8	R	28	1	7.8							CR 6/30			
Control /	4	Surr	95	4	7.9	4	19.8	R	28	1	8.3							TS 7/1			
Control /	5	Surr	95	4	7.8	4	20.1	R	29	1	8.4							TS 7/2			
Control /	6	Surr	95	4	7.7	4	20.0	R	29	1	8.2							BK 7/3			
Control /	7	Surr	95	4	7.6	4	20.3	R	28	5	8.2							BK 7/4			
Control /	8	Surr	95	4	7.6	4	20.3	R	30	5	8.0							MMB 7/5			
Control /	9	Surr	95	4	7.9	4	20.3	R	29	5	8.2							MMB 7/6			
Control /	10	Surr	95	4	7.6	4	20.3	R	29	5	8.2							CR 7/7			
Control /	11	Surr	95	4	7.7	4	20.2	R	28	5	8.3							CR 7/8			
Control /	12	Surr	95	4	8.4	4	20.0	R	28	5	8.5							CR 7/9			
Control /	13	Surr	95	4	7.9	4	20.2	R	28	5	8.2							MMB 7/10			
Control /	14	Surr	95	4	8.2	4	20.0	R	27	5	8.2							CR 7/11			
Control /	15	Surr	95	4	8.5	4	20.0	R	27	5	8.3							TS 7/12			
Control /	16	Surr	95	4	8.1	4	20.0	R	27	5	8.3							TS 7/13			
Control /	17	Surr	95	4	7.7	4	20.0	R	27	5	8.3							CR 7/14			
Control /	18	Surr	95	4	7.9	4	20.0	R	27	5	8.2							TS 7/15			
Control /	19	Surr	95	4	8.2	4	20.1	R	27	5	8.3							TS 7/16			
Control /	20	Surr	95	4	7.9	4	20.0	R	27	5	8.1							TS 7/17			

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR	WATER QUALITY DATA										TECH/DATE
				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
RF01A/	0	Surr	121	4	6.6	4	19.3	R	29	1	7.8			MMB 6/27/08
RF01A/	1	Surr	121	4	7.6	4	20.3	R	29	1	8.1			TS 6/28
RF01A/	2	Surr	121	4	7.7	4	20.5	R	29	1	8.1			TS 6/29
RF01A/	3	Surr	121	4	7.6	4	19.9	R	28	1	8.1		CR	CR 6/30
RF01A/	4	Surr	121	4	7.9	4	20.0	R	28	1	8.1			TS 7/1
RF01A/	5	Surr	121	4	7.7	4	20.2	R	28	1	8.1			A 7/2
RF01A/	6	Surr	121	4	7.7	4	20.2	R	29	1	8.2		BK	BK 7/3
RF01A/	7	Surr	121	4	7.6	4	20.2	R	28	5	7.9			BK 7/4
RF01A/	8	Surr	121	4	7.5	4	20.3	R	30	5	8.1			MMB 7/5
RF01A/	9	Surr	121	4	7.9	4	20.4	R	29	5	8.3		MMB	MMB 7/6
RF01A/	10	Surr	121	4	7.7	4	20.4	R	29	5	8.2			CR 7/7
RF01A/	11	Surr	121	4	7.8	4	20.1	R	28	5	8.2			CR 7/8
RF01A/	12	Surr	121	4	8.5	4	19.8	R	28	5	8.3		CR	CR 7/9
RF01A/	13	Surr	121	4	8.0	4	20.2	R	28	5	8.2			MMB 7/10
RF01A/	14	Surr	121	4	8.1	4	20.1	R	27	5	8.3			CR 7/11
RF01A/	15	Surr	121	4	8.4	4	20.3	R	28	5	8.3		A	A 7/12
RF01A/	16	Surr	121	4	7.9	4	20.2	R	28	5	8.3			A 7/13
RF01A/	17	Surr	121	4	7.8	4	20.0	R	28	5	8.3			CR 7/14
RF01A/	18	Surr	121	4	8.1	4	19.5	R	27	5	8.2		TS	CR 7/15
RF01A/	19	Surr	121	4	8.3	4	20.1	R	28	5	8.2			A 7/16
RF01A/	20	Surr	121	4	7.8	4	20.0	R	28	5	8.1			A 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOW#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA											
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit		
RF02A/	0	Surr	180	4	7.1	4	18.8	R	28	1	7.7		MMMB 6/27/08
RF02A/	1	Surr	180	4	7.6	4	20.3	R	28	1	8.0		TS 6/28
RF02A/	2	Surr	180	4	7.7	4	20.2	R	28	1	8.1	TS	TS 6/29
RF02A/	3	Surr	180	4	7.5	4	19.6	R	28	1	8.1	CR	CR 6/30
RF02A/	4	Surr	180	4	7.8	4	19.7	R	28	1	8.4	TS	TS 7/1
RF02A/	5	Surr	180	4	7.8	4	20.2	R	29	1	8.4		✓ 7/2
RF02A/	6	Surr	180	4	7.6	4	20.2	R	29	1	8.4	BK	BH 7/3
RF02A/	7	Surr	180	4	7.6	4	20.3	R	28	5	8.2		BH 7/4
RF02A/	8	Surr	180	4	7.4	4	20.1	R	29	5	7.6	MMMB	MMMB 7/5
RF02A/	9	Surr	180	4	7.9	4	20.3	R	29	5	8.2	MMMB	MMMB 7/6
RF02A/	10	Surr	180	4	7.7	4	20.2	R	28	5	8.4	CR	CR 7/7
RF02A/	11	Surr	180	4	7.8	4	19.8	R	28	5	7.7		CR 7/8
RF02A/	12	Surr	180	4	8.3	4	20.2	R	28	5	8.4	CR	CR 7/9
RF02A/	13	Surr	180	4	7.8	4	20.1	R	27	5	7.6		MMMB 7/10
RF02A/	14	Surr	180	4	8.2	4	19.5	R	28	5	8.3	CR	CR 7/11
RF02A/	15	Surr	180	4	6.5	4	19.9	R	28	5	8.0		✓ 7/12
RF02A/	16	Surr	180	4	8.0	4	20.2	R	27	5	8.2		✓ 7/13
RF02A/	17	Surr	180	4	7.7	4	20.2	R	28	5	8.2		CR 7/14
RF02A/	18	Surr	180	4	7.9	4	19.9	R	27	5	8.2	TS	CR 7/15
RF02A/	19	Surr	180	4	8.2	4	20.2	R	27	5	8.2		✓ 7/16
RF02A/	20	Surr	180	4	7.8	4	20.1	R	28	5	8.1		✓ 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS		WATER QUALITY DATA										TECH/DATE
	DAY	REP	JAR	DO (mg/L)	TEMP (C)	TEMP	SALINITY (ppt)	pH		WATER RENEWAL	Feeding		
				> 6.0	20 ± 1	20 ± 1	28 ± 1	meter	meter	meter	meter		
RF03A /	0	Surr	164	4	7.6	4	19.2	R	29	1	7.8		MMB 6/27/08
RF03A /	1	Surr	164	4	7.4	4	20.2	R	29	1	8.0		TS 6/28
RF03A /	2	Surr	164	4	7.8	4	20.2	R	29	1	8.1	TS	TS 6/29
RF03A /	3	Surr	164	4	7.4	4	19.9	R	28	1	8.0	CR	CR 6/30
RF03A /	4	Surr	164	4	7.8	4	19.8	R	28	1	8.1	TS	TS 7-11
RF03A /	5	Surr	164	4	7.5	4	20.1	R	28	1	8.2		J 7/2
RF03A /	6	Surr	164	4	7.3	4	20.1	R	29	1	8.5	BH	BH 7/3
RF03A /	7	Surr	164	4	7.4	4	20.3	R	28	5	8.1		BH 7/4
RF03A /	8	Surr	164	4	7.2	4	20.3	R	29	5	8.3	MMB	MMB 7/5
RF03A /	9	Surr	164	4	7.6	4	20.3	R	29	5	8.4	MMB	MMB 7/6
RF03A /	10	Surr	164	4	7.5	4	20.2	R	28	5	8.1	CR	CR 7/7
RF03A /	11	Surr	164	4	7.6	4	20.2	R	28	5	8.3		CR 7/8
RF03A /	12	Surr	164	4	8.1	4	20.1	R	28	5	8.2	CR	CR 7/9
RF03A /	13	Surr	164	4	7.6	4	20.3	R	27	5	8.1		MMB 7/10
RF03A /	14	Surr	164	4	7.9	4	19.9	R	28	5	8.2	CR	CR 7/11
RF03A /	15	Surr	164	4	8.1	4	20.3	R	28	5	8.3		J 7/12
RF03A /	16	Surr	164	4	7.6	4	20.1	R	27	5	8.2	J	J 7/13
RF03A /	17	Surr	164	4	7.4	4	20.1	R	28	5	8.1		CR 7/14
RF03A /	18	Surr	164	4	7.7	4	19.9	R	27	5	8.1	TS	CR 7/15
RF03A /	19	Surr	164	4	8.2	4	20.1	R	27	5	8.1		J 7/16
RF03A /	20	Surr	164	4	7.6	4	20.1	R	28	5	8.0		J 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0 D.O.	meter	°C	meter	28 ± 1	meter	8.0 ± 1.0			
BA01A /	0	Surr	98	4	7.6	4	19.2	R	29	1	7.9			MMB 6/27/08
BA01A /	1	Surr	98	4	7.5	4	20.3	R	29	1	8.0			TS 6/28/08
BA01A /	2	Surr	98	4	7.7	4	20.2	R	29	1	8.1		TS	TS 6/29
BA01A /	3	Surr	98	4	7.7	4	19.9	R	28	1	8.0	CR		CR 6/30
BA01A /	4	Surr	98	4	7.9	4	19.9	R	28	1	8.2		TS	TS 7/1
BA01A /	5	Surr	98	4	7.8	4	20.1	R	29	1	8.2			✓ 7/2
BA01A /	6	Surr	98	4	7.6	4	20.3	R	29	1	8.3	BH		BH 7/3
BA01A /	7	Surr	98	4	7.5	4	20.3	R	28	5	8.4			BH 7/4
BA01A /	8	Surr	98	4	7.5	4	20.3	R	30	5	8.5	MMB	MMB	MMB 7/5
BA01A /	9	Surr	98	4	7.8	4	20.3	R	29	5	8.6	MMB	MMB	MMB 7/6
BA01A /	10	Surr	98	4	7.7	4	19.8	R	29	5	8.6		CR	CR 7/7
BA01A /	11	Surr	98	4	7.8	4	20.1	R	28	5	8.6			CR 7/8
BA01A /	12	Surr	98	4	8.3	4	19.9	R	28	5	8.6	CR	CR	CR 7/9
BA01A /	13	Surr	98	4	7.8	4	20.2	R	29	5	8.4			MMB 7/10
BA01A /	14	Surr	98	4	8.2	4	19.9	R	28	5	8.6		CR	CR 7/11
BA01A /	15	Surr	98	4	8.4	4	20.2	R	28	5	8.3	✓		✓ 7/12
BA01A /	16	Surr	98	4	7.9	4	20.1	R	28	5	8.2		✓	✓ 7/13
BA01A /	17	Surr	98	4	7.7	4	20.0	R	27	5	8.2			CR 7/14
BA01A /	18	Surr	98	4	7.9	4	19.9	R	27	5	8.3	TS	TS	CR 7/15
BA01A /	19	Surr	98	4	8.2	4	20.2	R	27	5	8.2			✓ 7/16
BA01A /	20	Surr	98	4	7.7	4	20.1	R	28	5	8.0			✓ 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	D.O.	meter	°C	meter	ppt			
BL02A/	0	Surr	38	4	7.3	4	19.2	R	29	1	7.8			MMB 6/27/08
BL02A/	1	Surr	38	4	7.5	4	20.2	R	29	1	8.0			TS 6/28
BL02A/	2	Surr	38	4	7.6	4	20.2	R	29	1	8.1		B	TS 6/29
BL02A/	3	Surr	38	4	7.3	4	19.9	R	28	1	8.3	CR		CR 6/30
BL02A/	4	Surr	38	4	7.7	4	18.2	R	28	1	8.5		TS	TS 7/1
BL02A/	5	Surr	38	4	7.2	4	19.9	R	27	1	8.8			TS 7/2
BL02A/	6	Surr	38	4	7.1	4	20.3	R	27	1	8.9	BK		BK 7/3
BL02A/	7	Surr	38	4	7.2	4	20.4	R	28	5	8.8			BK 7/4
BL02A/	8	Surr	38	4	7.2	4	20.3	R	29	5	8.6		NIMB	NIMB 7/5
BL02A/	9	Surr	38	4	7.7	4	20.3	R	28	5	8.5	MMB		NIMB 7/6
BL02A/	10	Surr	38	4	7.4	4	20.3	R	28	5	8.2		CR	CR 7/7
BL02A/	11	Surr	38	4	7.7	4	20.0	R	29	5	8.2			MMB 7/8
BL02A/	12	Surr	38	4	8.4	4	19.8	R	28	5	8.2	CR		CR 7/9
BL02A/	13	Surr	38	4	7.9	4	20.2	R	28	5	8.2			MMB 7/10
BL02A/	14	Surr	38	4	8.4 ¹⁰	4	20.1	R	27	5	8.1	CR		CR 7/11
BL02A/	15	Surr	38	4	8.4	4	20.1	R	28	5	8.3			TS 7/12
BL02A/	16	Surr	38	4	7.9	4	20.2	R	27	5	8.1			TS 7/13
BL02A/	17	Surr	38	4	8.0	4	20.0	R	27	5	8.1			CR 7/14
BL02A/	18	Surr	38	4	7.9	4	20.1	R	27	5	8.1	TS		CR 7/15
BL02A/	19	Surr	38	4	9.2	4	20.1	R	27	5	8.0			TS 7/16
BL02A/	20	Surr	38	4	7.8	4	20.1	R	27	5	8.0			TS 7/17

@meter changed CR 7/11

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
BL03A /	0	Surr	175	4	7.4	4	18.6	R	29	1	7.8			MMB 6/27/08
BL03A /	1	Surr	175	4	7.6	4	20.2	R	29	1	8.0			B 6/28
BL03A /	2	Surr	175	4	7.6	4	20.2	R	29	1	8.1		B	B 6/29
BL03A /	3	Surr	175	4	7.1	4	19.9	R	28	1	8.1	CR		CR 6/30
BL03A /	4	Surr	175	4	7.8	4	19.7	R	28	1	8.5		B	B 7/1
BL03A /	5	Surr	175	4	7.7	4	20.2	R	29	1	8.7			Y 7/2
BL03A /	6	Surr	175	4	7.4	4	20.4	R	29	1	8.8	BH	BH	BH 7/3
BL03A /	7	Surr	175	4	7.5	4	20.3	R	28	5	8.4			BH 7/4
BL03A /	8	Surr	175	4	7.6	4	19.6	R	29	5	8.4		MMB	MMB 7/5
BL03A /	9	Surr	175	4	7.8	4	20.3	R	29	5	8.5	MMB		MMB 7/6
BL03A /	10	Surr	175	4	7.6	4	20.2	R	28	5	8.4		CR	CR 7/7
BL03A /	11	Surr	175	4	7.7	4	20.1	R	28	5	8.3			CR 7/8
BL03A /	12	Surr	175	4	8.3	4	20.1	R	28	5	8.3	CR		CR 7/9
BL03A /	13	Surr	175	4	7.8	4	20.1	R	28	5	8.1			MMB 7/10
BL03A /	14	Surr	175	4	8.2	4	19.8	R	28	5	8.2		CR	CR 7/11
BL03A /	15	Surr	175	4	8.5	4	20.0	R	28	5	8.3	Y		Y 7/12
BL03A /	16	Surr	175	4	7.9	4	20.1	R	28	5	8.2		Y	Y 7/13
BL03A /	17	Surr	175	4	7.6	4	20.1	R	28	5	8.2			CR 7/14
BL03A /	18	Surr	175	4	7.9	4	19.9	R	27	5	8.3	TS		CR 7/15
BL03A /	19	Surr	175	4	8.2	4	20.1	R	27	5	8.1			Y 7/16
BL03A /	20	Surr	175	4	7.8	4	20.1	R	28	5	8.1			Y 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				> 6.0	D.O.	TEMP	°C	meter	meter	meter	meter			
BL04A/	0	Surr	84	4	6.2	4	19.5	R	28	1	7.6			CR 6/28/08
BL04A/	1	Surr	84	4	7.5	4	20.3	R	28	1	8.1			TS 6/28
BL04A/	2	Surr	84	4	7.7	4	20.2	R	28	1	8.2		TS	TS 6/29
BL04A/	3	Surr	84	4	7.5	4	19.8	R	28	1	8.1	CR		CR 6/30
BL04A/	4	Surr	84	4	7.7	4	19.7	R	28	1	8.2		TS	TS 7/1
BL04A/	5	Surr	84	4	7.9	4	17.3	R	28	1	8.4			7/2
BL04A/	6	Surr	84	4	7.5	4	19.8	R	29	1	8.6	BH		BH 7/3
BL04A/	7	Surr	84	4	7.4	4	20.3	R	28	5	8.7			BH 7/4
BL04A/	8	Surr	84	4	7.5	4	20.0	R	28	5	8.6	MMB		MMB 7/5
BL04A/	9	Surr	84	4	7.9	4	20.3	R	29	5	8.6	MMB		MMB 7/6
BL04A/	10	Surr	84	4	7.9	4	19.2	R	29	5	8.5		CR	CR 7/7
BL04A/	11	Surr	84	4	7.6	4	20.0	R	29	5	8.3			MMB 7/8
BL04A/	12	Surr	84	4	8.3	4	19.9	R	29	5	8.5	CR		CR 7/9
BL04A/	13	Surr	84	4	7.9	4	20.1	R	28	5	8.4			MMB 7/10
BL04A/	14	Surr	84	4	8.1	4	20.0	R	27	5	8.4		CR	CR 7/11
BL04A/	15	Surr	84	4	8.5	4	20.0	R	28	5	8.3			7/12
BL04A/	16	Surr	84	4	8.0	4	20.0	R	27	5	8.3			7/13
BL04A/	17	Surr	84	4	7.6	4	20.2	R	27	5	8.2			CR 7/14
BL04A/	18	Surr	84	4	7.9	4	20.0	R	27	5	8.4	TS		CR 7/15
BL04A/	19	Surr	84	4	8.2	4	20.1	R	27	5	8.2			7/16
BL04A/	20	Surr	84	4	7.7	4	20.0	R	27	5	8.2			7/17

① WC 7/12/08 ↓

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
BL06A/	0	Surr	111	4	7.3	4	19.0	R	29	1	7.9			MMB 6/27/08
BL06A/	1	Surr	111	4	7.6	4	20.3	R	29	1	8.1			TS 6/28
BL06A/	2	Surr	111	4	7.8	4	20.2	R	29	1	8.1		TS	6/29
BL06A/	3	Surr	111	4	7.6	4	20.0	R	28	1	8.1	CR		CR 6/30
BL06A/	4	Surr	111	4	7.9	4	19.7	R	28	1	8.1		TS	7/1
BL06A/	5	Surr	111	4	7.8	4	19.9	R	29	1	8.2			7/2
BL06A/	6	Surr	111	4	7.6	4	20.3	R	29	1	8.2	BH		BH 7/3
BL06A/	7	Surr	111	4	7.6	4	20.3	R	28	5	8.2			BH 7/4
BL06A/	8	Surr	111	4	7.6	4	20.3	R	31	5	8.3	MMB		MMB 7/5
BL06A/	9	Surr	111	4	7.8	4	20.3	R	29	5	8.4	MMB		MMB 7/6
BL06A/	10	Surr	111	4	7.6	4	20.3	R	29	5	8.5	CR		CR 7/7
BL06A/	11	Surr	111	4	7.8	4	20.2	R	28	5	8.5			CR 7/8
BL06A/	12	Surr	111	4	8.4	4	19.9	R	28	5	8.5	CR		CR 7/9
BL06A/	13	Surr	111	4	7.9	4	20.1	R	28	5	8.3			MMB 7/10
BL06A/	14	Surr	111	4	8.2	4	20.1	R	28	5	8.5	CR		CR 7/11
BL06A/	15	Surr	111	4	8.4	4	20.2	R	28	5	8.3			7/12
BL06A/	16	Surr	111	4	8.0	4	20.2	R	28	5	8.3			7/13
BL06A/	17	Surr	111	4	7.7	4	20.1	R	28	5	8.3			CR 7/14
BL06A/	18	Surr	111	4	8.0	4	19.7	R	27	5	8.3	TS		CR 7/15
BL06A/	19	Surr	111	4	8.3	4	20.1	R	27	5	8.2			7/16
BL06A/	20	Surr	111	4	7.9	4	19.9	R	27	5	8.1			7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Nearthes arenaceodontata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0 D.O.	meter	°C	meter	28 ± 1	meter	8.0 ± 1.0			
EH02A /	0	Surr	144	4	6.9	4	19.0	R	29	1	8.0			NMB 6/27/08
EH02A /	1	Surr	144	4	7.7	4	20.3	R	29	1	8.2			B 6/28
EH02A /	2	Surr	144	4	7.7	4	20.2	R	29	1	8.2		TS	TS 6/29
EH02A /	3	Surr	144	4	7.6	4	20.0	R	28	1	8.1	CR		CR 6/30
EH02A /	4	Surr	144	4	7.9	4	20.0	R	28	1	8.2		TS	TS 7/1
EH02A /	5	Surr	144	4	7.8	4	20.1	R	28	1	8.4			✓ 7/2
EH02A /	6	Surr	144	4	7.7	4	20.0	R	27	1	8.2	BH	BH	BH 7/3
EH02A /	7	Surr	144	4	7.8	4	20.3	R	28	5	7.9			BH 7/4
EH02A /	8	Surr	144	4	7.5	4	20.2	R	29	5	8.1		NMB	NMB 7/5
EH02A /	9	Surr	144	4	7.9	4	20.2	R	29	5	8.4	NMB		NMB 7/6
EH02A /	10	Surr	144	4	7.7	4	20.2	R	28	5	8.1		CR	CR 7/7
EH02A /	11	Surr	144	4	7.8	4	20.2	R	28	5	8.1			CR 7/8
EH02A /	12	Surr	144	4	8.3	4	20.1	R	28	5	8.3	CR		CR 7/9
EH02A /	13	Surr	144	4	7.9	4	20.3	R	28	5	8.0			NMB 7/10
EH02A /	14	Surr	144	4	8.2	4	19.9	R	28	5	8.3		CR	CR 7/11
EH02A /	15	Surr	144	4	8.3	4	20.3	R	28	5	8.1	✓		✓ 7/12
EH02A /	16	Surr	144	4	8.0	4	20.2	R	28	5	8.3		✓	✓ 7/13
EH02A /	17	Surr	144	4	7.7	4	20.1	R	28	5	8.3			CR 7/14
EH02A /	18	Surr	144	4	7.9	4	19.9	R	27	5	8.3	TS		CR 7/15
EH02A /	19	Surr	144	4	8.2	4	20.1	R	27	5	8.2			✓ 7/16
EH02A /	20	Surr	144	4	7.8	4	20.1	R	28	5	8.1			✓ 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
EI02A/	0	Surr	155	4	6.9	4	19.0	R	29	1	7.9			MMS 6/27/08
EI02A/	1	Surr	155	4	7.6	4	20.3	R	29	1	8.1			TS 6/28
EI02A/	2	Surr	155	4	7.7	4	20.2	R	29	1	8.1		TS	TS 6/29
EI02A/	3	Surr	155	4	7.6	4	19.9	R	28	1	8.1	CR		CR 6/30
EI02A/	4	Surr	155	4	7.9	4	19.8	R	28	1	8.2		TS	TS 7/1
EI02A/	5	Surr	155	4	7.7	4	20.1	R	28	1	8.2			TS 7/2
EI02A/	6	Surr	155	4	7.7	4	19.9	R	28	1	8.2	BH		BH 7/3
EI02A/	7	Surr	155	4	7.7	4	20.3	R	28	5	8.1			BH 7/4
EI02A/	8	Surr	155	4	7.6	4	20.2	R	29	5	8.1		MMS	MMS 7/5
EI02A/	9	Surr	155	4	8.0	4	20.3	R	29	5	8.2	MMS		MMS 7/6
EI02A/	10	Surr	155	4	7.7	4	20.3	R	28	5	8.2		CR	CR 7/7
EI02A/	11	Surr	155	4	7.9	4	20.0	R	28	5	8.1			CR 7/8
EI02A/	12	Surr	155	4	8.4	4	20.1	R	28	5	8.2	CR		CR 7/9
EI02A/	13	Surr	155	4	7.9	4	20.3	R	28	5	8.1			MMS 7/10
EI02A/	14	Surr	155	4	8.2	4	20.0	R	28	5	8.1		CR	CR 7/11
EI02A/	15	Surr	155	4	8.4	4	20.3	R	28	5	8.1			TS 7/12
EI02A/	16	Surr	155	4	8.1	4	20.0	R	29	5	8.2			TS 7/13
EI02A/	17	Surr	155	4	7.7	4	20.1	R	28	5	8.1			CR 7/14
EI02A/	18	Surr	155	4	7.9	4	20.0	R	27	5	8.1	TS		CR 7/15
EI02A/	19	Surr	155	4	8.2	4	20.1	R	27	5	9.1			TS 7/16
EI02A/	20	Surr	155	4	7.9	4	20.1	R	28	5	8.0			TS 7/17

OMF 7:30 AM

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	°C	meter	ppt	meter	unit			
FP01A/	0	Surr	87	4	7.5	4	19.5	R	28	1	7.8			CR 6/27/08
FP01A/	1	Surr	87	4	7.6	4	20.3	R	28	1	8.1			TS 6/28
FP01A/	2	Surr	87	4	7.8	4	20.1	R	28	1	8.1		TS	TS 6/29
FP01A/	3	Surr	87	4	7.6	4	19.9	R	28	1	8.0			CR 6/30
FP01A/	4	Surr	87	4	8.0	4	19.5	R	28	1	8.1		TS	TS 7/1
FP01A/	5	Surr	87	4	7.9	4	19.5	R	28	1	8.3			TS 7/2
FP01A/	6	Surr	87	4	7.5	4	20.3	R	27	1	8.5	BK	BK	BK 7/3
FP01A/	7	Surr	87	4	7.5	4	20.3	R	28	5	8.2			BK 7/4
FP01A/	8	Surr	87	4	7.6	4	20.1	R	28	5	8.2		MMB	MMB 7/5
FP01A/	9	Surr	87	4	8.0	4	20.3	R	29	5	8.2	MMB		MMB 7/6
FP01A/	10	Surr	87	4	8.0	4	20.3	R	28	5	8.5		CR	CR 7/7
FP01A/	11	Surr	87	4	7.8	4	19.7	R	29	5	7.8			MMB 7/8
FP01A/	12	Surr	87	4	8.4	4	19.9	R	29	5	8.5	CR		CR 7/9
FP01A/	13	Surr	87	4	7.4	4	20.1	R	28	5	8.0			MMB 7/10
FP01A/	14	Surr	87	4	7.9	4	19.9	R	27	5	8.2		CR	CR 7/11
FP01A/	15	Surr	87	4	8.3	4	20.1	R	27	5	8.3			TS 7/12
FP01A/	16	Surr	87	4	7.9	4	20.0	R	27	5	8.3			TS 7/13
FP01A/	17	Surr	87	4	7.6	4	20.1	R	27	5	8.4			CR 7/14
FP01A/	18	Surr	87	4	8.0	4	19.6	R	27	5	8.4	TS		CR 7/15
FP01A/	19	Surr	87	4	8.2	4	20.1	R	27	5	8.2			TS 7/16
FP01A/	20	Surr	87	4	7.7	4	20.0	R	27	5	8.2			TS 7/17

DWR CR 7/7

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	>6.0	meter	20 ± 1	meter	28 ± 1			
FT01A/	0	Surr	79	4	7.5	4	19.2	R	29	1	7.8			MMB 6/27/08
FT01A/	1	Surr	79	4	7.6	4	20.2	R	29	1	8.1			TS 6/28
FT01A/	2	Surr	79	4	7.7	4	20.2	R	29	1	8.1		B	TS 6/29
FT01A/	3	Surr	79	4	7.6	4	19.7	R	28	1	8.1	CR		CR 6/30
FT01A/	4	Surr	79	4	7.5	4	19.7	R	29	1	8.3		B	B 7/1
FT01A/	5	Surr	79	4	7.6	4	20.0	R	29	1	8.5			7/2
FT01A/	6	Surr	79	4	6.8	4	20.4	R	29	1	8.5	BK		BH 7/3
FT01A/	7	Surr	79	4	7.5	4	20.3	R	28	5	8.6			BH 7/4
FT01A/	8	Surr	79	4	7.3	4	20.4	R	28	5	8.6	MMB	MMB	MMB 7/5
FT01A/	9	Surr	79	4	7.7	4	20.4	R	29	5	8.6	MMB		MMB 7/6
FT01A/	10	Surr	79	4	7.5	4	20.3	R	28	5	8.5		CR	CR 7/7
FT01A/	11	Surr	79	4	7.5	4	20.1	R	30	5	8.4			MMB 7/8
FT01A/	12	Surr	79	4	8.3	4	19.9	R	29	5	8.5	CR		CR 7/9
FT01A/	13	Surr	79	4	7.7	4	20.1	R	28	5	8.4			MMB 7/10
FT01A/	14	Surr	79	4	7.5	4	20.0	R	27	5	8.4		CR	7/11 CR
FT01A/	15	Surr	79	4	8.2	4	20.2	R	27	5	8.4	J		7/12 J
FT01A/	16	Surr	79	4	7.1	4	20.1	R	27	5	8.3		+	7/13 +
FT01A/	17	Surr	79	4	7.7	4	20.1	R	27	5	8.4			CR 7/14
FT01A/	18	Surr	79	4	7.6	4	20.0	R	27	5	8.4	TS		CR 7/15
FT01A/	19	Surr	79	4	8.1	4	20.1	R	27	5	8.2			7/16
FT01A/	20	Surr	79	4	7.7	4	20.0	R	27	5	8.1			7/17

0 meter changed 7/5 CR

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
FT04A /	0	Surr	106	4	7.6	4	19.1	R	29	1	7.9			MMB 6/27/08
FT04A /	1	Surr	106	4	7.5	4	20.3	R	29	1	8.0			TS 6/28
FT04A /	2	Surr	106	4	7.7	4	20.3	R	29	1	8.0		TS	TS 6/29
FT04A /	3	Surr	106	4	7.5	4	20.0	R	28	1	8.1	CR		CR 6/30
FT04A /	4	Surr	106	4	7.8	4	19.9	R	28	1	8.2			TS 7/1
FT04A /	5	Surr	106	4	7.8	4	20.2	R	29	1	8.3			TS 7/2
FT04A /	6	Surr	106	4	7.5	4	20.4	R	29	1	8.3	BH		BH 7/3
FT04A /	7	Surr	106	4	7.6	4	20.4	R	28	5	8.3			BH 7/4
FT04A /	8	Surr	106	4	7.4	4	20.4	R	31	5	8.1	MMB		MMB 7/5
FT04A /	9	Surr	106	4	7.8	4	20.2	R	29	5	8.4	MMB		MMB 7/6
FT04A /	10	Surr	106	4	7.6	4	20.3	R	29	5	8.4		CR	CR 7/7
FT04A /	11	Surr	106	4	7.7	4	20.3	R	28	5	8.3			CR 7/8
FT04A /	12	Surr	106	4	8.3	4	20.1	R	28	5	8.4	CR		CR 7/9
FT04A /	13	Surr	106	4	7.7	4	20.2	R	28	5	8.2			MMB 7/10
FT04A /	14	Surr	106	4	8.1	4	20.1	R	27	5	8.3		CR	CR 7/11
FT04A /	15	Surr	106	4	8.3	4	20.2	R	28	5	8.3			TS 7/12
FT04A /	16	Surr	106	4	8.1	4	20.0	R	28	5	8.3			TS 7/13
FT04A /	17	Surr	106	4	7.7	4	20.0	R	27	5	8.2			CR 7/14
FT04A /	18	Surr	106	4	7.9	4	20.1	R	27	5	8.2	B/MMB		CR 7/15
FT04A /	19	Surr	106	4	8.2	4	20.1	R	27	5	8.2			TS 7/16
FT04A /	20	Surr	106	4	7.7	4	20.1	R	28	5	8.1			TS 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0 D.O.	meter	°C	meter	ppt	meter	8.0±1.0 pH			
FT06A /	0	Surr	107	4	7.6	4	19.1	R	29	1	7.9			MMB 6/27/08
FT06A /	1	Surr	107	4	7.6	4	20.3	R	29	1	8.1			T 6/29
FT06A /	2	Surr	107	4	7.7	4	20.3	R	29	1	8.1		T	TS 6/29
FT06A /	3	Surr	107	4	7.6	4	20.0	R	28	1	8.1	CR		CR 6/30
FT06A /	4	Surr	107	4	7.9	4	19.9	R	28	1	8.1		TS	TS 7/1
FT06A /	5	Surr	107	4	7.8	4	20.2	R	28	1	8.2			7/2
FT06A /	6	Surr	107	4	7.6	4	20.3	R	29	1	8.2	BK	BH	BH 7/3
FT06A /	7	Surr	107	4	7.6	4	20.4	R	28	5	8.2		BH	BH 7/4
FT06A /	8	Surr	107	4	7.5	4	20.3	R	31	5	8.2		MMB	MMB 7/5
FT06A /	9	Surr	107	4	7.9	4	20.3	R	29	5	8.3	MMB		MMB 7/6
FT06A /	10	Surr	107	4	7.7	4	20.3	R	29	5	8.3		CR	CR 7/7
FT06A /	11	Surr	107	4	7.8	4	20.2	R	28	5	8.4			CR 7/8
FT06A /	12	Surr	107	4	8.4	4	20.0	R	28	5	8.3	CR		CR 7/9
FT06A /	13	Surr	107	4	7.9	4	20.1	R	28	5	8.3			MMB 7/10
FT06A /	14	Surr	107	4	8.2	4	20.1	R	28	5	8.4		CR	CR 7/11
FT06A /	15	Surr	107	4	8.4	4	20.2	R	28	5	8.3	7		7/12
FT06A /	16	Surr	107	4	7.9	4	20.2	R	28	5	8.3		7	7/17
FT06A /	17	Surr	107	4	7.7	4	20.1	R	28	5	8.3			CR 7/14
FT06A /	18	Surr	107	4	7.9	4	20.0	R	27	5	8.3	TS	TS	CR 7/15
FT06A /	19	Surr	107	4	8.2	4	20.1	R	27	5	8.2			7/16
FT06A /	20	Surr	107	4	7.8	4	20.0	R	28	5	8.1			7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBCH	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	WATER QUALITY DATA										DO (mg/L) >6.0	TEMP (C) 20 ± 1	SALINITY (ppt) 28 ± 1	pH 8.0 ± 1.0	WATER RENEWAL	Feeding	TECH/DATE
	DAY	REP	JAR	DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH	meter	meter	meter							
	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter							
FT11A/	0	Surr	27	4	7.6	4	19.2	R	29	1	7.9			MMS 6/27/08			
FT11A/	1	Surr	27	4	7.9	4	19.1	R	29	1	8.0			TS 6/28			
FT11A/	2	Surr	27	4	7.6	4	20.2	R	29	1	8.1		TS	TS 6/29			
FT11A/	3	Surr	27	4	7.4	4	19.7	R	28	1	8.2		CR	CR 6/30			
FT11A/	4	Surr	27	4	8.2	4	18.4	R	29	1	8.1		TS	TS 7/1			
FT11A/	5	Surr	27	4	7.7	4	20.2	R	28	1	8.1			TS 7/2			
FT11A/	6	Surr	27	4	7.6	4	20.1	R	29	1	8.2		BH	BH 7/3			
FT11A/	7	Surr	27	4	7.6	4	20.3	R	28	5	8.1			BH 7/4			
FT11A/	8	Surr	27	4	7.5	4	20.4	R	29	5	8.2		MMS	MMS 7/5			
FT11A/	9	Surr	27	4	8.0	4	20.3	R	29	5	8.1		MMS	MMS 7/6			
FT11A/	10	Surr	27	4	7.7	4	20.3	R	29	5	8.2		CR	CR 7/7			
FT11A/	11	Surr	27	4	7.7	4	20.1	R	29	5	8.2			MMS 7/8			
FT11A/	12	Surr	27	4	8.4	4	19.9	R	29	5	8.2		CR	CR 7/9			
FT11A/	13	Surr	27	4	7.9	4	20.3	R	28	5	8.2			MMS 7/10			
FT11A/	14	Surr	27	4	8.2	4	20.0	R	27	5	8.1		CR	CR 7/11			
FT11A/	15	Surr	27	4	8.5	4	20.1	R	27	5	8.3			TS 7/12			
FT11A/	16	Surr	27	4	8.0	4	20.0	R	27	5	8.2			TS 7/13			
FT11A/	17	Surr	27	4	7.7	4	20.0	R	27	5	8.2			CR 7/14			
FT11A/	18	Surr	27	4	8.0	4	20.0	R	27	5	8.2		TS	CR 7/15			
FT11A/	19	Surr	27	4	8.2	4	20.1	R	27	5	8.0			TS 7/16			
FT11A/	20	Surr	27	4	7.8	4	20.1	R	28	5	8.0			TS 7/17			

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0 D.O.	meter	°C	meter	28 ± 1	meter	8.0 ± 1.0			
IE03A/	0	Surr	10	4	7.7	4	19.2	R	29	1	7.9			NMB 6/27/08
IE03A/	1	Surr	10	4	7.7	4	19.3	R	29	1	8.0			TS 6/28/08
IE03A/	2	Surr	10	4	7.7	4	20.2	R	29	1	8.0		TS	TS 6/29
IE03A/	3	Surr	10	4	7.6	4	19.7	R	28	1	8.1	CR		CR 6/30
IE03A/	4	Surr	10	4	7.8	4	19.7	R	29	1	8.1		B	TS 7/1
IE03A/	5	Surr	10	4	7.6	4	20.0	R	28	1	8.5			TS 7/2
IE03A/	6	Surr	10	4	7.8	4	19.0	R	29	1	8.8	BK	BK	BH 7/3
IE03A/	7	Surr	10	4	7.5	4	20.1	R	28	5	8.7			BK 7/4
IE03A/	8	Surr	10	4	7.5	4	20.4	R	29	5	8.5		NMB	NMB 7/5
IE03A/	9	Surr	10	4	7.9	4	20.3	R	28	5	8.5	NMB		NMB 7/6
IE03A/	10	Surr	10	4	7.5	4	20.3	R	28	5	8.5		CR	CR 7/7
IE03A/	11	Surr	10	4	7.7	4	20.1	R	29	5	8.4			NMB 7/8
IE03A/	12	Surr	10	4	8.3	4	19.7	R	28	5	8.6	CR		CR 7/9
IE03A/	13	Surr	10	4	7.8	4	20.1	R	28	5	8.4			NMB 7/10
IE03A/	14	Surr	10	4	8.2	4	19.8	R	27	5	8.3		GR	GR 7/11
IE03A/	15	Surr	10	4	8.4	4	20.2	R	27	5	8.3			TS 7/12
IE03A/	16	Surr	10	4	7.9	4	20.0	R	27	5	8.2		A	TS 7/13
IE03A/	17	Surr	10	4	7.5	4	20.0	R	27	5	8.1			CR 7/14
IE03A/	18	Surr	10	4	8.0	4	19.8	R	27	5	8.2	TS		CR 7/15
IE03A/	19	Surr	10	4	8.2	4	19.9	R	27	5	7.9			TS 7/16
IE03A/	20	Surr	10	4	7.7	4	20.1	R	27	5	7.8			TS 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
IE04A/	0	Surr	2	4	7.6	4	18.8	R	27	1	7.8			MMS 4/27/08
IE04A/	1	Surr	2	4	7.7	4	19.7	R	29	1	8.0			TS 6/28.
IE04A/	2	Surr	2	4	7.7	4	20.2	R	29	1	8.0		TS	TS 6/29
IE04A/	3	Surr	2	4	7.6	4	19.7	R	28	1	8.1	CR		CR 6/30
IE04A/	4	Surr	2	4	7.8	4	19.4	R	29	1	7.7		TS	TS 7/1
IE04A/	5	Surr	2	4	7.5	4	20.2	R	29	1	8.4			TS 7/2
IE04A/	6	Surr	2	4	7.5	4	20.0	R	29	1	8.8	BK		BH 7/3
IE04A/	7	Surr	2	4	7.3	4	19.9	R	28	5	8.8			BH 7/4
IE04A/	8	Surr	2	4	7.4	4	20.3	R	29	5	8.9	MMB		MMB 7/5
IE04A/	9	Surr	2	4	7.6	4	20.0	R	28	5	8.8	MMB		MMB 7/6
IE04A/	10	Surr	2	4	7.2	4	20.1	R	28	5	8.8		CR	CR 7/7
IE04A/	11	Surr	2	4	7.5	4	20.0	R	28	5	8.5			MMB 7/8
IE04A/	12	Surr	2	4	8.3	4	19.3	R	28	5	8.5	CR		CR 7/9
IE04A/	13	Surr	2	4	7.8	4	20.1	R	28	5	8.4			MMB 7/10
IE04A/	14	Surr	2	4	8.0	4	19.7	R	27	5	8.2		CR	CR 7/11
IE04A/	15	Surr	2	4	8.4	4	20.1	R	27	5	8.3			TS 7/12
IE04A/	16	Surr	2	4	8.0	4	19.7	R	28	5	8.0		TS	TS 7/13
IE04A/	17	Surr	2	4	7.5	4	19.7	R	27	5	8.1			CR 7/14
IE04A/	18	Surr	2	4	7.9	4	19.6	R	27	5	8.1	TS		CR 7/15
IE04A/	19	Surr	2	4	8.1	4	19.8	R	27	5	7.2			TS 7/16
IE04A/	20	Surr	2	4	7.6	4	19.9	R	28	5	7.8			TS 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
IE06A /	0	Surr	130	4	6.1	4	19.4	R	29	1	7.9			MMS 6/27/08
IE06A /	1	Surr	130	4	7.6	4	20.3	R	29	1	8.0			TS 6/28
IE06A /	2	Surr	130	4	7.6	4	20.3	R	29	1	8.0		B	TS 6/29
IE06A /	3	Surr	130	4	7.3	4	20.0	R	28	1	8.0	CR		CR 6/30
IE06A /	4	Surr	130	4	7.8	4	20.0	R	28	1	8.1		B	B 7/1
IE06A /	5	Surr	130	4	7.6	4	20.1	R	28	1	8.1			7/2
IE06A /	6	Surr	130	4	7.4	4	19.5	R	29	1	8.5	BH	BH	BH 7/3
IE06A /	7	Surr	130	4	7.3	4	20.3	R	28	5	8.2			BH 7/4
IE06A /	8	Surr	130	4	7.4	4	20.2	R	30	5	8.6		MMS	MMS 7/5
IE06A /	9	Surr	130	4	7.7	4	20.4	R	29	5	8.7	MMS		MMS 7/6
IE06A /	10	Surr	130	4	7.7	4	19.7	R	29	5	8.6		CR	CR 7/7
IE06A /	11	Surr	130	4	7.6	4	20.2	R	28	5	8.6			CR 7/8
IE06A /	12	Surr	130	4	8.3	4	20.1	R	28	5	8.6	CR		CR 7/9
IE06A /	13	Surr	130	4	7.7	4	20.3	R	28	5	8.4			MMS 7/10
IE06A /	14	Surr	130	4	8.0	4	20.1	R	28	5	8.4		CR	CR 7/11
IE06A /	15	Surr	130	4	8.2	4	20.3	R	28	5	8.2			7/12
IE06A /	16	Surr	130	4	7.8	4	20.1	R	29	5	8.2			7/13
IE06A /	17	Surr	130	4	7.6	4	20.1	R	28	5	8.2			CR 7/14
IE06A /	18	Surr	130	4	7.8	4	20.0	R	27	5	8.3	TS	TS	CR 7/15
IE06A /	19	Surr	130	4	8.1	4	20.1	R	27	5	8.2			7/16
IE06A /	20	Surr	130	4	7.7	4	20.0	R	28	5	8.1			7/17

0 MK 7.3.08 BH

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0	meter	D.O.	meter	°C	meter	28 ± 1			
IE09A /	0	Surr	154	4	6.4	4	19.2	R	29	1	7.9			MMB 6/27/08
IE09A /	1	Surr	154	4	7.4	4	20.3	R	29	1	8.1			TS 6/28
IE09A /	2	Surr	154	4	7.7	4	20.3	R	29	1	8.1		TS	TS 6/29
IE09A /	3	Surr	154	4	7.5	4	19.9	R	28	1	8.2	CR		CR 6/30
IE09A /	4	Surr	154	4	7.9	4	19.9	R	28	1	8.3		TS	TS 7/1
IE09A /	5	Surr	154	4	7.7	4	20.1	R	28	1	8.4			✓ 7/2
IE09A /	6	Surr	154	4	7.4	4	20.2	R	29	1	8.4	BH		BH 7/3
IE09A /	7	Surr	154	4	7.6	4	20.4	R	28	5	8.1			BH 7/4
IE09A /	8	Surr	154	4	7.5	4	19.8	R	29	5	8.2		MMB	MMB 7/5
IE09A /	9	Surr	154	4	7.8	4	20.3	R	30	5	8.2	MMB		MMB 7/6
IE09A /	10	Surr	154	4	7.7	4	20.0	R	29	5	8.1		CR	CR 7/7
IE09A /	11	Surr	154	4	8.0	4	20.0	R	29	5	8.1			CR 7/8
IE09A /	12	Surr	154	4	8.4	4	20.1	R	29	5	8.2	CR		CR 7/9
IE09A /	13	Surr	154	4	7.8	4	20.2	R	27	5	8.0			MMB 7/10
IE09A /	14	Surr	154	4	8.1	4	20.0	R	28	5	8.1			CR 7/11
IE09A /	15	Surr	154	4	8.3	4	20.2	R	28	5	8.1	✓		✓ 7/12
IE09A /	16	Surr	154	4	8.3	4	20.1	R	28	5	8.2			✓ 7/13
IE09A /	17	Surr	154	4	7.6	4	20.1	R	28	5	8.1			CR 7/14
IE09A /	18	Surr	154	4	7.9	4	19.9	R	27	5	8.1	TS		CR 7/15
IE09A /	19	Surr	154	4	8.2	4	20.1	R	27	5	8.2			✓ 7/16
IE09A /	20	Surr	154	4	7.8	4	20.1	R	28	5	8.1			✓ 7/17

**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
IE14A/	0	Surr	139	4	7.1	4	19.2	R	29	1	8.0			MMB 6/27/08
IE14A/	1	Surr	139	4	7.6	4	20.0	R	29	1	8.1			TS 6/28
IE14A/	2	Surr	139	4	7.7	4	20.3	R	29	1	8.1		TS	TS 6/29
IE14A/	3	Surr	139	4	7.6	4	20.0	R	28	1	8.1	CR		CR 6/30
IE14A/	4	Surr	139	4	7.9	4	20.0	R	28	1	8.2		B	TS 7/1
IE14A/	5	Surr	139	4	7.7	4	20.1	R	28	1	8.5			L 7/2
IE14A/	6	Surr	139	4	7.5	4	20.3	R	29	1	8.9	15h	15h	BH 7/3
IE14A/	7	Surr	139	4	7.4	4	20.3	R	28	5	8.5			15h 7/4
IE14A/	8	Surr	139	4	7.4	4	20.2	R	29	5	8.6		MMB	MMB 7/5
IE14A/	9	Surr	139	4	7.8	4	20.3	R	29	5	8.7	MMB		MMB 7/6
IE14A/	10	Surr	139	4	7.5	4	20.3	R	29	5	8.6		CR	CR 7/7
IE14A/	11	Surr	139	4	7.8	4	20.0	R	29	5	8.3			CR 7/8
IE14A/	12	Surr	139	4	8.3	4	20.1	R	29	5	8.5	CR		CR 7/9
IE14A/	13	Surr	139	4	7.9	4	20.3	R	28	5	8.0			MMB 7/10
IE14A/	14	Surr	139	4	8.2	4	20.0	R	28	5	8.4		CR	CR 7/11
IE14A/	15	Surr	139	4	8.3	4	20.2	R	29	5	8.2			L 7/12
IE14A/	16	Surr	139	4	8.0	4	20.0	R	28	5	8.0			L 7/13
IE14A/	17	Surr	139	4	7.6	4	20.1	R	28	5	8.3			CR 7/14
IE14A/	18	Surr	139	4	7.9	4	20.0	R	27	5	8.3	TS		CR 7/15
IE14A/	19	Surr	139	4	8.2	4	20.1	R	27	5	9.2			L 7/16
IE14A/	20	Surr	139	4	7.9	4	20.1	R	28	5	8.1			L 7/17

Ⓢ vrc 7/13/08 L

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0 D.O.	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
IE15A/	0	Surr	113	4	7.2	4	19.2	R	29	1	7.9			MMB 6/27/08
IE15A/	1	Surr	113	4	7.6	4	20.3	R	29	1	8.0			TS 6/28
IE15A/	2	Surr	113	4	7.7	4	20.3	R	29	1	8.1		B	B 6/29
IE15A/	3	Surr	113	4	7.6	4	20.0	R	28	1	8.1	CR		CR 6/30
IE15A/	4	Surr	113	4	7.8	4	19.9	R	28	1	8.1		B	B 7/1
IE15A/	5	Surr	113	4	7.7	4	20.2	R	28	1	8.2			A 7/2
IE15A/	6	Surr	113	4	7.6	4	19.7	R	29	1	8.2	BH	BK	BH 7/3
IE15A/	7	Surr	113	4	7.5	4	20.4	R	28	5	8.2			BH 7/4
IE15A/	8	Surr	113	4	7.5	4	20.2	R	30	5	8.4		MMB	MMB 7/5
IE15A/	9	Surr	113	4	7.8	4	20.3	R	29	5	8.5	MMB		MMB 7/6
IE15A/	10	Surr	113	4	7.7	4	20.0	R	29	5	8.5		CR	CR 7/7
IE15A/	11	Surr	113	4	7.7	4	20.3	R	28	5	8.5			CR 7/8
IE15A/	12	Surr	113	4	8.5	4	19.7 ⁰	R	28	5	8.5	CR		CR 7/9
IE15A/	13	Surr	113	4	7.8	4	20.2	R	27	5	8.3			MMB 7/10
IE15A/	14	Surr	113	4	8.2	4	20.1	R	27	5	8.4		CR	CR 7/11
IE15A/	15	Surr	113	4	8.5	4	19.7	R	28	5	8.2	J		A 7/12
IE15A/	16	Surr	113	4	7.9	4	20.2	R	27	5	8.3			A 7/13
IE15A/	17	Surr	113	4	7.7	4	20.0	R	27	5	8.3			CR 7/14
IE15A/	18	Surr	113	4	8.0	4	19.7	R	27	5	8.3	TS	B	CR 7/15
IE15A/	19	Surr	113	4	8.2	4	20.1	R	27	5	8.2			A 7/16
IE15A/	20	Surr	113	4	7.8	4	20.0	R	27	5	8.1			A 7/17

01E CR 7/4

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
IH01A/	0	Surr	96	4	7.3	4	19.3	R	29	1	8.0			MMB 6/27/08
IH01A/	1	Surr	96	4	7.5	4	20.3	R	29	1	8.0			TS 6/28
IH01A/	2	Surr	96	4	7.5	4	20.2	R	29	1	7.9		TS	TS 6/29
IH01A/	3	Surr	96	4	7.2	4	20.0	R	28	1	8.0	CR		CR 6/30
IH01A/	4	Surr	96	4	7.8	4	19.7	R	28	1	8.1		TS	TS 7/1
IH01A/	5	Surr	96	4	7.6	4	20.1	R	28	1	8.2			7/2
IH01A/	6	Surr	96	4	7.5	4	20.2	R	29	1	8.1	BH	BH	BH 7/3
IH01A/	7	Surr	96	4	7.5	4	20.3	R	28	5	8.0			BH 7/4
IH01A/	8	Surr	96	4	7.4	4	20.3	R	30	5	8.2		MMB	MMB 7/5
IH01A/	9	Surr	96	4	7.7	4	20.3	R	29	5	8.1	MMB		MMB 7/6
IH01A/	10	Surr	96	4	7.5	4	20.2	R	29	5	8.2		CR	CR 7/7
IH01A/	11	Surr	96	4	7.6	4	20.2	R	28	5	8.3			CR 7/8
IH01A/	12	Surr	96	4	8.2	4	19.9	R	28	5	8.3	CR		CR 7/9
IH01A/	13	Surr	96	4	7.7	4	20.2	R	28	5	8.3			MMB 7/10
IH01A/	14	Surr	96	4	8.2	4	19.9	R	27	5	8.2		CR	CR 7/11
IH01A/	15	Surr	96	4	8.3	4	20.2	R	27	5	8.3			7/12
IH01A/	16	Surr	96	4	8.1	4	19.8	R	27	5	8.2			7/13
IH01A/	17	Surr	96	4	7.6	4	20.0	R	27	5	8.3			CR 7/14
IH01A/	18	Surr	96	4	7.8	4	20.0	R	27	5	8.2	TS		CR 7/15
IH01A/	19	Surr	96	4	8.1	4	20.1	R	28	5	8.2			7/16
IH01A/	20	Surr	96	4	7.7	4	20.0	R	27	5	8.0			7/17



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA									
	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE						
				meter	D.O.	meter	>6.0	meter	20 ± 1	meter	28 ± 1				meter	8.0 ± 1.0				
IH02A/	0	Surr	103	4	7.7	4	19.3	R	28	1	7.9			CR 6/27/08						
IH02A/	1	Surr	103	4	7.7	4	20.1	R	28	1	8.0			TS 6/28						
IH02A/	2	Surr	103	4	7.7	4	20.2	R	28	1	8.0		TS	TS 6/29						
IH02A/	3	Surr	103	4	7.5	4	20.0	R	28	1	8.0	CR		CR 6/30						
IH02A/	4	Surr	103	4	7.9	4	19.9	R	28	1	8.2		TS	TS 7/1						
IH02A/	5	Surr	103	4	7.7	4	20.2	R	29	1	8.2			L 7/2						
IH02A/	6	Surr	103	4	7.4	4	20.4	R	29	1	8.3	BH		BH 7/3						
IH02A/	7	Surr	103	4	7.5	4	20.4	R	28	5	8.4			BH 7/4						
IH02A/	8	Surr	103	4	7.5	4	20.3	R	30	5	8.4	MMB		MMB 7/5						
IH02A/	9	Surr	103	4	7.8	4	20.3	R	29	5	8.5			MMB 7/6						
IH02A/	10	Surr	103	4	7.6	4	20.3	R	29	5	8.3	CR		CR 7/7						
IH02A/	11	Surr	103	4	7.8	4	20.2	R	28	5	8.4			CR 7/8						
IH02A/	12	Surr	103	4	8.3	4	20.0	R	28	5	8.4	CR		CR 7/9						
IH02A/	13	Surr	103	4	7.8	4	20.2	R	28	5	8.3			MMB 7/10						
IH02A/	14	Surr	103	4	8.2	4	20.0	R	27	5	8.3	CR		CR 7/11						
IH02A/	15	Surr	103	4	8.3	4	20.3	R	28	5	8.3			L 7/12						
IH02A/	16	Surr	103	4	7.9	4	20.3	R	27	5	8.3			L 7/13						
IH02A/	17	Surr	103	4	7.7	4	20.0	R	27	5	8.3			CR 7/14						
IH02A/	18	Surr	103	4	7.9	4	19.9	R	27	5	8.2	TS		CR 7/15						
IH02A/	19	Surr	103	4	8.2	4	20.2	R	26	5	8.2			L 7/16						
IH02A/	20	Surr	103	4	7.9	4	20.1	R	28	5	8.1			L 7/17						

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
KP05A/	0	Surr	68	4	7.6	4	19.4	R	29	1	7.9			NMB 6/27/08
KP05A/	1	Surr	68	4	7.8	4	20.2	R	29	1	8.0			TS 6/28
KP05A/	2	Surr	68	4	7.7	4	20.3	R	29	1	8.1		TS	6/29
KP05A/	3	Surr	68	4	7.6	4	19.8	R	28	1	8.1	CR		CR 6/30
KP05A/	4	Surr	68	4	8.0	4	19.4	R	29	1	8.2		TS	7/1
KP05A/	5	Surr	68	4	7.7	4	20.2	R	29	1	8.4			7/2
KP05A/	6	Surr	68	4	7.7	4	20.0	R	29	1	8.4	BH		BH 7/3
KP05A/	7	Surr	68	4	7.5	4	20.3	R	28	5	8.5			BH 7/4
KP05A/	8	Surr	68	4	7.5	4	20.4	R	29	5	8.5	NMB		NMB 7/5
KP05A/	9	Surr	68	4	7.8	4	20.4	R	29	5	8.6	NMB		NMB 7/6
KP05A/	10	Surr	68	4	7.6	4	20.2	R	28	5	8.5		CR	CR 7/7
KP05A/	11	Surr	68	4	7.7	4	19.9	R	30	5	8.3			NMB 7/8
KP05A/	12	Surr	68	4	8.4	4	19.9	R	29	5	8.2	CR		CR 7/9
KP05A/	13	Surr	68	4	7.9	4	20.2	R	28	5	8.3			NMB 7/10
KP05A/	14	Surr	68	4	8.1	4	20.1	R	27	5	8.2		CR	CR 7/11
KP05A/	15	Surr	68	4	8.4	4	20.2	R	27	5	8.4			7/12
KP05A/	16	Surr	68	4	7.9	4	20.2	R	27	5	8.1			7/12
KP05A/	17	Surr	68	4	7.6	4	20.1	R	27	5	8.1			CR 7/14
KP05A/	18	Surr	68	4	7.9	4	20.1	R	27	5	8.1	TS		CR 7/15
KP05A/	19	Surr	68	4	9.2	4	20.1	R	27	5	8.0			7/16
KP05A/	20	Surr	68	4	7.7	4	20.0	R	27	5	8.0			7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0 D.O.	meter	°C	meter	28 ± 1	meter	8.0 ± 1.0			
KP06A/	0	Surr	138	4	6.9	4	19.0	R	29	1	8.0			MMB 6/27/08
KP06A/	1	Surr	138	4	7.5	4	20.3	R	29	1	8.0			TS 6/28
KP06A/	2	Surr	138	4	7.6	4	20.3	R	29	1	8.0		B	B 6/29
KP06A/	3	Surr	138	4	7.5	4	20.0	R	28	1	8.0	CR		CR 6/30
KP06A/	4	Surr	138	4	7.8	4	20.0	R	28	1	8.1		B	TS 7/1
KP06A/	5	Surr	138	4	7.7	4	20.1	R	29	1	8.1			TS 7/2
KP06A/	6	Surr	138	4	7.5	4	20.3	R	29	1	8.2	BH		BH 7/3
KP06A/	7	Surr	138	4	7.5	4	20.3	R	28	5	8.3			BH 7/4
KP06A/	8	Surr	138	4	7.4	4	20.3	R	29	5	8.4		MMB	MMB 7/5
KP06A/	9	Surr	138	4	7.7	4	20.3	R	29	5	8.6	MMB		MMB 7/6
KP06A/	10	Surr	138	4	7.5	4	20.2	R	28	5	8.7		CR	CR 7/7
KP06A/	11	Surr	138	4	7.6	4	20.2	R	28	5	8.6			CR 7/8
KP06A/	12	Surr	138	4	8.3	4	20.1	R	28	5	8.6	CR		CR 7/9
KP06A/	13	Surr	138	4	7.8	4	20.3	R	28	5	8.2			MMB 7/10
KP06A/	14	Surr	138	4	8.0	4	20.0	R	28	5	8.4		CR	CR 7/11
KP06A/	15	Surr	138	4	8.2	4	20.3	R	78	5	8.2			TS 7/12
KP06A/	16	Surr	138	4	7.9	4	20.0	R	27	5	8.3			TS 7/13
KP06A/	17	Surr	138	4	7.6	4	20.1	R	28	5	8.3			CR 7/14
KP06A/	18	Surr	138	4	7.8	4	19.9	R	27	5	8.3	TS	B	CR 7/15
KP06A/	19	Surr	138	4	8.2	4	20.1	R	27	5	8.2			TS 7/16
KP06A/	20	Surr	138	4	7.7	4	20.1	R	28	5	8.1			TS 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	TEMP	meter	SALINITY	meter	pH			
MA02A/	0	Surr	93	4	6.8	4	19.2	R	29	1	7.7			MMB 6/27/08
MA02A/	1	Surr	93	4	7.5	4	19.9	R	29	1	8.0			TS 6/28
MA02A/	2	Surr	93	4	7.5	4	20.1	R	28	1	8.0		TS	6/29
MA02A/	3	Surr	93	4	7.2	4	20.0	R	28	1	8.0	CR		CR 6/30
MA02A/	4	Surr	93	4	7.5	4	19.7	R	29	1	8.4		B	TS 7/1
MA02A/	5	Surr	93	4	7.4	4	20.0	R	29	1	8.8			7/2
MA02A/	6	Surr	93	4	7.3	4	20.1	R	29	1	8.9	BH	BH	7/3
MA02A/	7	Surr	93	4	7.4	4	20.2	R	28	5	8.8			BH 7/4
MA02A/	8	Surr	93	4	7.3	4	20.2	R	30	5	8.6		MMB	MMB 7/5
MA02A/	9	Surr	93	4	7.8	4	20.2	R	29	5	8.6	MMB		MMB 7/6
MA02A/	10	Surr	93	4	7.7	4	20.3	R	29	5	8.5		CR	CR 7/7
MA02A/	11	Surr	93	4	7.7	4	20.0	R	28	5	8.5			CR 7/8
MA02A/	12	Surr	93	4	8.4	4	19.5	R	28	5	8.4	CR		CR 7/9
MA02A/	13	Surr	93	4	7.7	4	20.1	R	28	5	7.7			MMB 7/10
MA02A/	14	Surr	93	4	8.0	4	19.9	R	27	5	8.3		CR	CR 7/11
MA02A/	15	Surr	93	4	8.4	4	20.2	R	27	5	8.2			7/12
MA02A/	16	Surr	93	4	8.0	4	20.0	R	27	5	8.2			7/13
MA02A/	17	Surr	93	4	7.7	4	20.0	R	27	5	8.3			CR 7/14
MA02A/	18	Surr	93	4	7.8	4	19.9	R	27	5	8.3		TS	CR 7/15
MA02A/	19	Surr	93	4	8.1	4	20.0	R	28	5	8.2			7/16
MA02A/	20	Surr	93	4	7.7	4	20.0	R	28	5	8.1			7/17



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0 D.O.	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
MA05A/	0	Surr	104	4	7.8	4	19.2	R	29	1	8.0			NMB 6/27/08
MA05A/	1	Surr	104	4	7.7	4	20.3	R	29	1	8.0			TS 6/28
MA05A/	2	Surr	104	4	7.7	4	20.3	R	29	1	8.0		TS	TS 6/29
MA05A/	3	Surr	104	4	7.6	4	20.0	R	28	1	8.1	CR		CR 6/30
MA05A/	4	Surr	104	4	7.9	4	19.9	R	28	1	8.2		TS	TS 7/1
MA05A/	5	Surr	104	4	7.7	4	20.2	R	28	1	8.4			✓ 7/2
MA05A/	6	Surr	104	4	7.5	4	20.3	R	29	1	8.5	BK		BK 7/3
MA05A/	7	Surr	104	4	7.5	4	20.3	R	28	5	8.5			BK 7/4
MA05A/	8	Surr	104	4	7.5	4	20.3	R	30	5	8.5	MMB		MMB 7/5
MA05A/	9	Surr	104	4	7.8	4	20.3	R	29	5	8.5	MMB		MMB 7/6
MA05A/	10	Surr	104	4	7.6	4	20.3	R	29	5	8.3		CR	CR 7/7
MA05A/	11	Surr	104	4	7.8	4	20.2	R	28	5	8.4			CR 7/8
MA05A/	12	Surr	104	4	8.4	4	20.0	R	28	5	8.4	CR		CR 7/9
MA05A/	13	Surr	104	4	7.9	4	20.1	R	28	5	8.4			MMB 7/10
MA05A/	14	Surr	104	4	8.4 ²⁰	4	20.0	R	27	5	8.4		CR	CR 7/11
MA05A/	15	Surr	104	4	8.3	4	20.2	R	28	5	8.3			✓ 7/12
MA05A/	16	Surr	104	4	8.0	4	20.1	R	28	5	8.2		✓	✓ 7/13
MA05A/	17	Surr	104	4	7.8	4	19.6	R	27	5	8.2			CR 7/14
MA05A/	18	Surr	104	4	7.9	4	20.0	R	27	5	8.2	TS		CR 7/15
MA05A/	19	Surr	104	4	9.2	4	20.1	R	27	5	8.2			✓ 7/16
MA05A/	20	Surr	104	4	7.8	4	20.1	R	28	5	8.1			✓ 7/17

0 meter changed CR 7/11



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L) >6.0		TEMP (C) 20 ± 1		SALINITY (ppt) 28 ± 1		pH 8.0 ± 1.0		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
MA06A /	0	Surr	124	4	6.3	4	19.3	R	29	1	8.0			MMB 6/27/08
MA06A /	1	Surr	124	4	7.6	4	20.3	R	29	1	8.1			TS 6/28
MA06A /	2	Surr	124	4	7.7	4	20.3	R	29	1	8.0		TS	TS 6/29/08
MA06A /	3	Surr	124	4	7.5	4	20.0	R	28	1	8.0	CR		CR 6/30/08
MA06A /	4	Surr	124	4	7.9	4	20.0	R	28	1	8.1		TS	TS 7/1
MA06A /	5	Surr	124	4	7.7	4	20.2	R	28	1	8.1			TS 7/2
MA06A /	6	Surr	124	4	7.4	4	20.8	R	29	1	8.3	BH		BH 7/3
MA06A /	7	Surr	124	4	7.6	4	20.3	R	28	5	8.0			BH 7/4
MA06A /	8	Surr	124	4	7.5	4	20.3	R	30	5	8.4		NMS	MMB 7/5
MA06A /	9	Surr	124	4	7.7	4	20.4	R	29	5	8.5	MMB		MMB 7/6
MA06A /	10	Surr	124	4	7.6	4	20.3	R	29	5	8.3		CR	CR 7/7
MA06A /	11	Surr	124	4	7.7	4	20.0	R	28	5	8.5			CR 7/8
MA06A /	12	Surr	124	4	8.4	4	20.1	R	28	5	8.5	CR		CR 7/9
MA06A /	13	Surr	124	4	7.9	4	20.2	R	28	5	8.3			MMB 7/10
MA06A /	14	Surr	124	4	8.2	4	20.1	R	28	5	8.2		CR	CR 7/11
MA06A /	15	Surr	124	4	8.3	4	20.3	R	24	5	8.3			TS 7/12
MA06A /	16	Surr	124	4	8.0	4	20.2	R	27	5	8.2			TS 7/13
MA06A /	17	Surr	124	4	7.6	4	20.1	R	27	5	8.3			
MA06A /	18	Surr	124	4	8.1	4	19.6	R	27	5	8.3	TS		CR 7/15
MA06A /	19	Surr	124	4	8.3	4	20.1	R	27	5	8.1			TS 7/16
MA06A /	20	Surr	124	4	7.9	4	20.1	R	27	5	8.1			TS 7/17

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
OH02A/	0	Surr	11	4	7.3	4	19.2	R	29	1	7.9			MMB 6/27/08
OH02A/	1	Surr	11	4	7.4	4	20.0	R	29	1	8.0			TS 6/28/08
OH02A/	2	Surr	11	4	7.6	4	20.2	R	29	1	8.0		TS	TS 6/29
OH02A/	3	Surr	11	4	7.6	4	19.7	R	28	1	8.1	CR		CR 6/30
OH02A/	4	Surr	11	4	7.9	4	19.8	R	28	1	8.1		TS	TS 7/1
OH02A/	5	Surr	11	4	7.7	4	20.1	R	28	1	8.2			7/2
OH02A/	6	Surr	11	4	7.6	4	20.3	R	29	1	8.3	BH		BH 7/3
OH02A/	7	Surr	11	4	7.6	4	20.2	R	26	5	8.2			BH 7/4
OH02A/	8	Surr	11	4	7.6	4	20.4	R	29	5	8.1	MMB		MMB 7/5
OH02A/	9	Surr	11	4	8.0	4	20.2	R	28	5	8.3	MMB		MMB 7/6
OH02A/	10	Surr	11	4	7.6	4	20.3	R	28	5	8.2		CR	CR 7/7
OH02A/	11	Surr	11	4	8.3	4	18.6	R	29	5	8.1			MMB 7/8
OH02A/	12	Surr	11	4	8.8	4	19.0	R	28	5	8.2	CR		CR 7/9
OH02A/	13	Surr	11	4	7.9	4	20.2	R	28	5	8.2			MMB 7/10
OH02A/	14	Surr	11	4	8.3	4	19.9	R	27	5	8.2	CR		CR 7/11
OH02A/	15	Surr	11	4	8.5	4	20.2	R	27	5	8.3			7/12
OH02A/	16	Surr	11	4	8.1	4	20.0	R	28	5	8.2			7/13
OH02A/	17	Surr	11	4	8.2	4	20.0	R	27	5	8.2			CR 7/14
OH02A/	18	Surr	11	4	8.0	4	20.0	R	27	5	8.2	TS		CR 7/15
OH02A/	19	Surr	11	4	8.2	4	20.1	R	27	5	8.0			7/16
OH02A/	20	Surr	11	4	7.8	4	20.1	R	27	5	7.9			7/17

CETIS QC Chart

Neanthes 10-d Survival and Growth Sediment Test

NewFields

Test Type: Survival-Growth

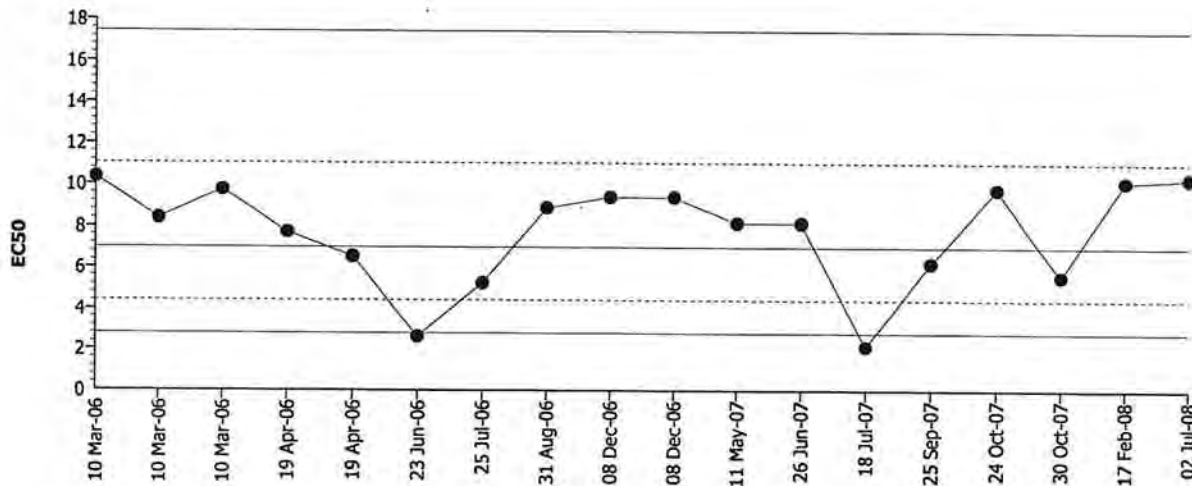
Organism: Neanthes arenaceodentata (Polycha

Material: Cadmium chloride

Protocol: PSEP (1995)

Endpoint: Proportion Survived

Source: Reference Toxicant-REF



Mean: 6.97532

Count: 17

-1s Warning Limit: 4.41072

-2s Action Limit: 2.78904

Sigma:

CV: 58.14%

+1s Warning Limit: 11.0311

+2s Action Limit: 17.4451

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Mar	10	10.35175	3.37643	0.86132			14-2451-5687	14-3844-2284
2			10	8.38556	1.41024	0.40174			07-0179-9882	09-0608-4239
3			10	9.73577	2.76045	0.72747			12-2949-2561	10-8322-9812
4		Apr	19	7.70725	0.73193	0.21770			11-0689-5535	16-2728-6447
5			19	6.52448	-0.45084	-0.14578			06-6982-0696	07-7843-7824
6		Jun	23	2.61220	-4.36313	-2.14292	(-)	(-)	11-2423-7791	08-2080-8513
7		Jul	25	5.22653	-1.74879	-0.62973			15-7582-9934	07-9049-7308
8		Aug	31	8.86577	1.89045	0.52323			16-7169-3504	00-9849-6979
9		Dec	8	9.37175	2.39643	0.64433			10-5822-0812	10-0140-9364
10			8	9.37175	2.39643	0.64433			10-5822-0812	08-7192-3895
11	2007	May	11	8.16253	1.18720	0.34292			03-7778-9913	06-1785-2165
12		Jun	26	8.16258	1.18726	0.34294			09-6212-3109	14-8493-4946
13		Jul	18	2.13748	-4.83785	-2.58051	(-)	(-)	09-5163-0637	11-9760-1230
14		Sep	25	6.20193	-0.77339	-0.25640			06-6354-6111	12-2113-4941
15		Oct	24	9.76006	2.78474	0.73291			05-9113-1606	14-0319-5260
16			30	5.55412	-1.42121	-0.49710			03-0327-1386	13-6201-5780
17	2008	Feb	17	10.12762	3.15230	0.81356			11-6935-8907	04-7495-8038
18		Jul	2	10.30107	3.32575	0.85061			07-0160-7176	03-3190-0644

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	07-0160-7176	07-0160-7176	08 Jul-08 3:55 PM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		7.5	15	13.3333	10.6066	15.91%

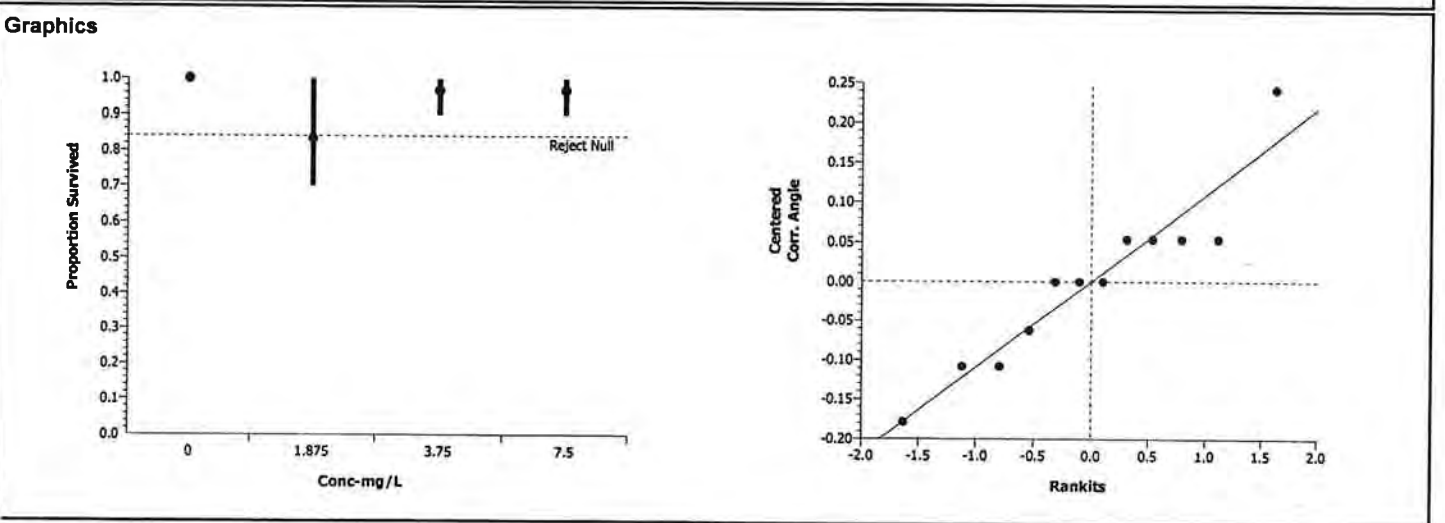
Group Comparisons							
Control	vs	Conc-mg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		1.875	2.32491	2.41651	0.0573	0.25144	Non-Significant Effect
		3.75	0.52208	2.41651	0.5384	0.25144	Non-Significant Effect
		7.5	0.52208	2.41651	0.5384	0.25144	Non-Significant Effect

ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	0.101099	0.0336997	3	2.08	0.18197	Non-Significant Effect
Error	0.1299195	0.0162399	8			
Total	0.23101847	0.0499396	11			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Modified Levene	4.12316	7.59099	0.04844	Equal Variances
Distribution	Shapiro-Wilk W	0.92396		0.32042	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	1.00000	1.00000	1.00000	0.00000	1.41202	1.41202	1.41202	0.00029	
1.875		3	0.83333	0.70000	1.00000	0.15275	1.17011	0.99116	1.41202	0.21738	
3.75		3	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409	
7.5		3	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409	

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		0.70000	1.00000	0.80000							
3.75		1.00000	0.90000	1.00000							
7.5		0.90000	1.00000	1.00000							



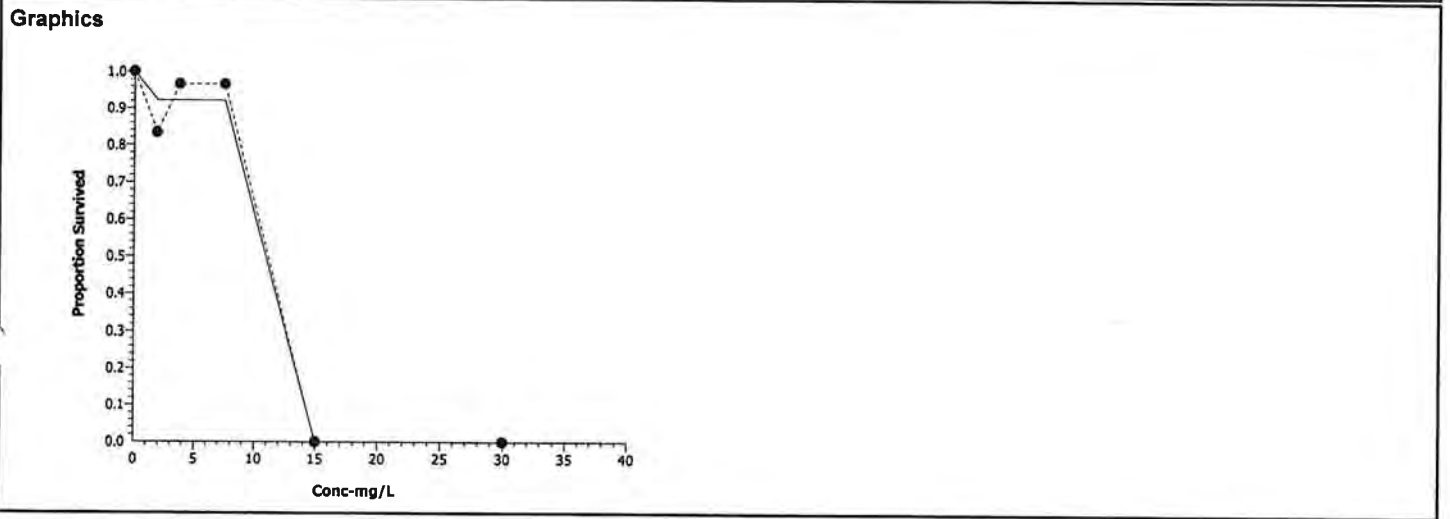
CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Trimmed Spearman-Karber	07-0160-7176	07-0160-7176	08 Jul-08 3:55 PM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0	7.78%	1.012882	0.008653535	10.30107	9.89863	10.71986

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	0.83333	0.70000	1.00000	0.03118	0.15275	25	30
3.75		3	0.96667	0.90000	1.00000	0.01179	0.05773	29	30
7.5		3	0.96667	0.90000	1.00000	0.01179	0.05773	29	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



CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Neanthes arenaceodentata	NEWFIELDS LABORATORY Port Gamble Room 1	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 0	PROJECT MANAGER 0	QUANTITY OF STOCK : 4.5 mL	QUANTITY OF DILUENT: 1500ml	INIT
Test ID 708 0418.06	LOT #: 065107C	ACTUAL: TEST START DATE: 02Jul08	ACTUAL: TEST END DATE: 06Jul08	DATE PREP 7/2/08
		TIME 1415	TIME 1300	

WATER QUALITY DATA

DIL.TIN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL		REFERENCE TOXICANT					
		cadmium chloride		cadmium					
TEST CONDITIONS									
CLIENT/ NEWFIELDS ID	CONCENTRATION		DO (mg/L)	TEMP(C)	SAL (ppt)	pH	TECHNICIAN		
	value	units						meter	unit
Ref.Tox.-cadmium	0	mg/L	> 6.0	20 ± 1	28 ± 1	8.00 ± 1			
			D.O.	TEMP.	SALINITY	pH	WQ TECH		
			meter	°C	ppt	meter			
	0	Stock	4	19.2	R	28	1	7.2	MMB
	4	Rep 2	4	19.0	R	28	1	6.9	MMB
Ref.Tox.-cadmium	0	Stock	4	19.3	R	28	1	7.3	MMB
	4	Rep 2	4	19.7	R	28	1	7.2	MMB
Ref.Tox.-cadmium	0	Stock	4	19.4	R	28	1	7.5	MMB
	4	Rep 2	4	19.6	R	28	1	7.4	MMB
Ref.Tox.-cadmium	0	Stock	4	19.5	R	28	1	7.5	MMB
	4	Rep 2	4	19.5	R	28	1	7.4	MMB
Ref.Tox.-cadmium	0	Stock	4	19.5	R	28	1	7.6	MMB
	4	Rep 2	4	19.7	R	28	1	7.5	MMB
Ref.Tox.-cadmium	0	Stock	4	19.4	R	28	1	7.6	MMB
	4	Rep	4	19.4	R	28	1	7.6	MMB

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES										
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1					PSEP 1995		Nearithes arenaceodentata										
Date and Initials		ENDPOINT DATA & OBSERVATIONS																							
REP	JAR	INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
Control /		1	37	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	96.26	170.46
Control /		2	70	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	90.13	145.98
Control /		3	118	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	56.94	110.98
Control /		4	14	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	96.27	124.70
Control /		5	28	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	96.54	146.88
RF01A /		1	76	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	106.54	169.53
RF01A /		2	135	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	91.08	164.77
RF01A /		3	150	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	95.68	137.88
RF01A /		4	71	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	93.79	176.64
RF01A /		5	74	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	106.75	180.77
RF02A /		1	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	111.54	157.64
RF02A /		2	41	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	91.71	156.73
RF02A /		3	42	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	96.84	132.20
RF02A /		4	88	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	99.30	131.43
RF02A /		5	86	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	94.64	130.23

(1) wrong by book

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

NEWFIELDS

CLIENT		Ecology & Environment		PROJECT		Port Angeles		JOB NO.		0		PROJECT MANAGER		0		NEWFIELDS LABORATORY					Port Gamble Room 1		PROTOCOL		PSEP 1995		SPECIES		Nearcthes arenaceofenitata						
				Date and Initials																															
				INITIALS																															
RF03A /	REP	JAN	129																																
	1																																		
	2																																		
	3																																		
	4																																		
IH03A /	REP	JAN	75																																
	1																																		
	2																																		
	3																																		
	4																																		
IH05A /	REP	JAN	117																																
	1																																		
	2																																		
	3																																		
	4																																		

ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAN	INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
RF03A /	1																						5	96.72	145.52	
	2																						5	117.84	162.38	
	3																						5	112.80	164.85	
	4																						5	117.82	174.70	
	5																						5	107.16	159.14	
IH03A /	1																						5	101.54	163.95	
	2																						5	98.65	171.07	
	3																						5	89.02	143.28	
	4																						5	94.59	154.69	
	5																						5	88.71	138.15	
IH05A /	1																						5	96.57	150.96	
	2																						5	92.23	158.91	
	3																						5	99.82	168.16	
	4																						5	88.50	127.77	
	5																						5	88.38	160.73	

① wrong box

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES																
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1		PSEP 1995		Neanthes arenaceodentata																
INITIALS OF ORGANISM		ENDPOINT DATA & OBSERVATIONS																										
5		REP	JAK	INITIALS	DATE AND INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
IH06A /	1	93				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	94.99	148.33
	2	73				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	87.76	180.57
	3	114				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	95.38	155.74
	4	51				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	98.83	127.37
	5	103				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	104.29	143.43
KP01A /	1	106				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	93.53	141.99
	2	23				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	97.75	162.65
	3	19				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	87.73	120.03
	4	79				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	108.11	152.75
	5	87				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	99.01	155.15
KP02A /	1	27				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	107.01	181.19
	2	139				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	102.82	180.17
	3	33				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	94.20	147.43
	4	136				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	99.05	151.90
	5	46				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	107.58	156.33

① Airline not functioning. DO = 0.4 mg/L, airline fixed D.O. rechecked = 7.3 mg/L

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT	Ecology & Environment		PROJECT		Port Angeles		JOB NO.		0		PROJECT MANAGER		NEWFIELDS LABORATORY		Port Gamble Room 1		PROTOCOL		PSEP 1995		SPECIES												
																					Neanthes arenaceodentata												
CLIENT NEWFIELD ID	REF	JAR	Date and Initials		ENDPOINT DATA & OBSERVATIONS																												
	#S	#M	L	F	A	D	U	N	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)		
KP03A /	1	64	2																													165.58	105.00
	2	130																														153.11	100.01
	3	126																														120.60	94.12
	4	151																														157.61	105.24
	5	112																														135.43	95.65
MA01A /	1	123																														179.25	96.66
	2	81																														178.74	105.36
	3	108																														139.56	91.70
	4	5																														189.21	114.74
	5	32																														173.73	95.04
BL01A /	1	91																														146.89	110.12
	2	142																														209.69	112.10
	3	72																														152.39	99.45
	4	111																														197.34	105.21
	5	141																														181.48	102.62

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT	Ecology & Environment		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES								
	Port Angeles		0		0		0		Port Gamble Room 1					PSEP 1995		Nearthes arenaceodentata								
	ENDPOINT DATA & OBSERVATIONS																							
CLIENT/NEWFIELDS ID	Date and Initials		OBSERVATIONS															TARE WEIGHT (mg)	TOTAL WEIGHT (mg)					
	REP	JAN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			16	17	18	19	20
CO02A /	1	63	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	96.93	175.63
	2	94	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	91.34	130.95
	3	107	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	104.81	159.38
	4	154	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	102.20	161.57
	5	113	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	88.74	127.87
DO03A /	1	104	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	102.27	133.64
	2	137	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	106.47	159.45
	3	119	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	87.79	166.59
	4	38	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	103.69	126.09
	5	36	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	97.71	177.69
DO04A /	1	109	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	84.86	149.84
	2	156	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	100.15	149.19
	3	115	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	104.60	178.60
	4	44	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	88.40	111.89
	5	85	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	89.68	122.26

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES													
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1		PSEP 1995		Neanthes arenaceodentata													
Date and Initials		ENDPOINT DATA & OBSERVATIONS																							
REP	JAR	INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
5																									
DO05A /																									
EC01AY E107A																									
EC02AT																									

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		Ecology & Environment		PROJECT		Port Angeles		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES									
				0		0		0		0		Port Gamble Room 1		PSEP 1995		Nearnthes arenaceodentata									
Date and Initials		ENDPOINT DATA & OBSERVATIONS																							
REP	JAR	INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
EC04A /		1	54																				5	100.29	154.70
		2	1																				5	105.16	157.61
		3	121																				5	94.55	150.80
		4	61																				5	88.01	138.40
		5	97																				5	100.15	145.46
ED03A /		1	17																				5	93.33	116.88
		2	99																				4	88.86	127.25
		3	100																				5	101.28	172.39
		4	92																				5	87.11	135.03
		5	105																				5	96.99	173.64
ED04A /		1	127																				5	96.40	134.59
		2	35																				5	90.57	132.20
		3	83																				5	99.31	161.14
		4	102																				4	88.83	127.86
		5	120																				5	101.50	140.12

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES																
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1		PSEP 1995		Nearithes arenaceodentata																
CLIENT/NEWFIELDS ID		REP	JAR	INITIALS	DATE AND INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
ED05A /	1	140				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	86.75	166.11	
	2	21				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	90.21	148.55	
	3	133				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	90.27	141.67	
	4	152				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	82.92	154.99	
	5	30				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	90.60	145.01	
MD01A /	1	10				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	89.11	149.64	
	2	52				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	81.59	100.48	
	3	48				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	103.19	134.13	
	4	80				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	90.61	134.45	
	5	47				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	99.85	171.98	
MD02A /	1	40				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	95.20	162.68	
	2	3				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	89.54	170.76	
	3	24				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	97.43	159.97	
	4	125				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	84.61	123.74	
	5	116				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	107.81	169.20	

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES																	
Ecology & Environment		Port Angeles		0		0		Port Gamble Room 1		PSEP 1995		Neanthes arenaceodentata																	
CLIENT/NEWFIELDS ID	REF	JAN	ENDPOINT DATA & OBSERVATIONS												TARE WEIGHT (mg)	TOTAL WEIGHT (mg)													
			DATE AND INITIALS	INITIAL #	1	2	3	4	5	6	7	8	9	10			11	12	13	14	15	16	17	18	19	20	NUMBER REMAINING		
MD03A /	1	60		2																						5	108.77	167.74	116
	2	12																								5	98.06	120.81	117
	3	57																								5	106.34	168.68	118
	4	59																								5	92.31	144.53	119
	5	64																								5	100.09	177.79	120
WW01A /	1	88																								5	108.24	140.66	121
	2	89																								4	91.66	147.08	122
	3	6																								5	104.13	158.65	123
	4	25																								5	105.15	162.60	124
	5	55																								5	110.98	156.38	125



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Neanthes, Batch 2	NewFields Test ID: 1101-004-860	Test Duration (days): 20
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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:	
7/18/08	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	
Control	Surr.	7/18/08 L	<0.5	20.0	7/18/08 CR	N	NA → 7		0.007	
RF01A	Surr.		<0.5						0.005	
RF02A	Surr.		1.16						0.008	
RF03A	Surr.		2.44						0.013	
IH03A	Surr.		1.36						0.013	
IH05A	Surr.		2.34						0.011	
IH06A	Surr.		2.07						0.017	
KP01A	Surr.		1.95						0.020	
KP02A	Surr.		1.47						0.009	
KP03A	Surr.		0.878						0.018	
MA01A	Surr.		2.75						0.021	
BL01A	Surr.		<0.5						0.025	
CO02A	Surr.		1.37						7.2	0.007
DO03A	Surr.		1.52						7.2	0.020
DO04A	Surr.		1.03						7.2	0.013
DO05A	Surr.		<0.5						6.9	0.019

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
EC01A	Surr.	7/18/08 JW	<0.5	20.0	7/18/08 CR	N	NA →		0.008
EC02A	Surr.	↓	<0.5	↓	↓	↓	↓		0.008
EC04A	Surr.		0.713					0.011	
ED03A	Surr.		1.85					0.007	
ED04A	Surr.		9.47					0.022	
ED05A	Surr.		0.928					0.017	
MD01A	Surr.		1.29					0.010	
MD02A	Surr.		3.62					0.011	
MD03A	Surr.		1.52					0.007	
VW01A	Surr.		↓					1.18	↓



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Neanthes, Batch 2	NewFields Test ID: 1101-004-860	Test Duration (days): 20
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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:	
7/18/08	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
Control	Surr.	JW 7/18/08	0.380	21.0	TS 7/18/08	N	7.7	30	0.063 0.380
RF01A	Surr.	}	0.577	}	}	}	7.7	27	0.118
RF02A	Surr.		3.24				7.6	28	0.256
RF03A	Surr.		4.47				7.5	29	0.047
IH03A	Surr.		3.46				7.5	30	0.940
IH05A	Surr.		4.45				7.5	28	0.694
IH06A	Surr.		4.57				7.2	28	1.10
KP01A	Surr.		3.82				7.4	29	0.098
KP02A	Surr.		3.73				7.4	29	0.383
KP03A	Surr.		2.65				7.4	29	0.475
MA01A	Surr.		6.45				7.4	28	0.964
BL01A	Surr.		1.68				7.5	29	9.50
CO02A	Surr.		6.03				7.2	29	0.450
DO03A	Surr.		3.53				7.2	29	0.545
DO04A	Surr.		2.48				7.2	28	0.497
DO05A	Surr.		0.455				6.9	28	0.497

① WE 7/18/08 TS

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
EC01A	Surr.	JW 7/18/08	0.956	21.0	JS 7/18/08	N	6.2 6.7	26	0.314
EC02A	Surr.	↓	0.298	↓	↓	↓	7.0 7.0	26	0.319
EC04A	Surr.		2.84				6.7	28	0.676
ED03A	Surr.		5.05				6.8	28	0.183
ED04A	Surr.		19.8				7.2	29	27.95
ED05A	Surr.		2.81				7.4	28	0.852
MD01A	Surr.		4.09				7.4	28	0.165
MD02A	Surr.		7.82				7.3	28	16.4
MD03A	Surr.		4.09				7.4	28	0.141
VW01A	Surr.		2.86				7.4	28	0.403

DIS 7/18/08 ✓

PA overlying Near us Day 10

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	TS 8/6/08	<0.5	20.0	TS 8/6/08	N	NA →		Ø
RFO1			<0.5						Ø
RFO2			<0.5						0.002
RFO3			<0.5						0.006
KPO2			<0.5						0.003
E107			<0.5						0.004
KPO1			<0.5						0.001
KPO3			<0.5						0.001
C002			<0.5						0.001
ECO4			<0.5						0.003
ED05			<0.5						Ø
IH06			<0.5						Ø
D005			<0.5						Ø
MD03			<0.5						Ø
D003			<0.5						0.003
WW01			<0.5						0.007
MA01			<0.5						0.001
D004			<0.5						Ø
BL01			<0.5						Ø
IH03			<0.5						Ø
ED04			5.80						0.001
MD02			<0.5						Ø
IH05			<0.5						Ø
ED03			<0.5						0.002
MD01			<0.5						Ø

NEWFIELDS

Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Neanthes, Batch 2	NewFields Test ID: 1101-004-860	Test Duration (days): 20
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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:	
8/12/08	20.5	

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.	8/8/08, MMB	20.5	22.0	8/8/08, MMB ^{S-2}	Y	7.4	28	0.072
RF01A	Surr.		20.5		8/12/08, MMB ^{NH₃}		7.3	28	0.036
RF02A	Surr.		20.5				7.1	28	0.103
RF03A	Surr.		20.5				6.8	29	0.035
IH03A	Surr.		20.5				6.6	28	0.285
IH05A	Surr.		0.619				6.9	28	0.284
IH06A	Surr.		20.5				6.9	28	0.234
KP01A	Surr.		20.5				6.9	28	0.055
KP02A	Surr.		20.5				7.0	28	0.026
KP03A	Surr.		20.5				6.8	28	0.228
MA01A	Surr.		20.5				7.0	28	0.385
BL01A	Surr.		0.614				6.8	28	0.076
CO02A	Surr.		1.05				6.8	28	0.296
DO03A	Surr.		20.5				7.6	28	0.194
DO04A	Surr.		20.5				7.5	28	0.149
DO05A	Surr.	↓	20.5	↓	↓	↓	7.1	28	0.070

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
EC01A	Surr.								
EC02A	Surr.								
EC04A	Surr.	8/8/08, MMB	<0.5	22.0	8/8/08, MMB ^{S-2}	Y	6.6	28	0.187
ED03A	Surr.		<0.5		8/12/08, MMB ^{NH₃}		6.4	28	0.092
ED04A	Surr.		3.75				6.9	28	0.117
ED05A	Surr.		<0.5				6.8	29	0.219
MD01A	Surr.		<0.5				7.0	28	0.295
MD02A	Surr.		1.05				6.7	28	0.098
MD03A	Surr.		<0.5				6.5	28	0.146
VW01A	Surr.		<0.5				7.3	28	0.311
E107A	Surr.		<0.5				6.6	28	0.223



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0 D.O.	meter	20 ± 1 TEMP °C	meter	28 ± 1 SALINITY ppt	meter	8.0 ± 1.0 pH			
Control /	0	Surr	53	4	7.9	4	20.3	R	28	5	8.0		CR	CR 7/17
Control /	1	Surr	53	4	7.8	4	20.1	R	29	5	8.0		CR	MMB 7/18
Control /	2	Surr	53	4	7.7	4	20.2	R	29	5	8.1		CR	CR 7/19
Control /	3	Surr	53	4	7.7	4	20.2	R	28	5	8.2	CR		CR 7/20
Control /	4	Surr	53	4	7.8	4	19.0	R	28	5	8.1			✓ 7/21
Control /	5	Surr	53	4	7.7	4	20.3	R	28	5	8.2			TS 7/22
Control /	6	Surr	53	4	7.8	4	20.0	R	28	5	8.1	MMB	TS	✓ 7/23
Control /	7	Surr	53	4	8.0	4	19.8	R	27	5	8.1			CR 7/24
Control /	8	Surr	53	4	8.1	4	20.1	1	28	1	8.2		BH	BH 7/25
Control /	9	Surr	53	4	7.9	4	20.0	1	28	1	8.2			BH 7/26
Control /	10	Surr	53	4	7.8	4	19.7	1	28	1	8.2		BH	BH 7/27
Control /	11	Surr	53	4	7.8	4	19.8	1	27	1	8.1			CR 7/28
Control /	12	Surr	53	4	7.7	4	20.3	1	27	1	8.1	TS	TS	TS 7/29
Control /	13	Surr	53	4	7.7	4	20.2	1	28	1	8.1			CR 7/30
Control /	14	Surr	53	4	7.7	4	20.2	1	28	1	8.0		CR	CR 7/31
Control /	15	Surr	53	4	7.6	4	20.4	1	28	1	8.1	TS		CR 8/1
Control /	16	Surr	53	4	7.6	4	20.5	1	28	1	8.1		TS	TS 8/2
Control /	17	Surr	53	4	7.7	4	19.6	1	28	1	8.0			TS 8/3
Control /	18	Surr	53	4	7.7	4	20.2	1	28	1	8.0	BH	BH	BH 8/4
Control /	19	Surr	53	4	7.7	4	20.3	1	28	1	8.0			MP 8/5
Control /	20	Surr	53	4	7.7	4	20.3	1	28	1	8.0			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 11:30 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
RF01A /	0	Surr	4	4	7.9	4	20.1	R	28	5	7.8		CR	CR 7/17
RF01A /	1	Surr	4	4	7.8	4	19.8	R	30	5	7.5			MMS 7/18
RF01A /	2	Surr	4	4	7.7	4	19.9	R	29	5	7.9		CR	CR 7/19
RF01A /	3	Surr	4	4	7.8	4	19.9	R	28	5	7.9	CR		CR 7/20
RF01A /	4	Surr	4	4	7.8	4	19.0	R	28	5	7.6		F	F 7/21
RF01A /	5	Surr	4	4	7.6	4	19.9	R	28	5	7.8			F 7/22
RF01A /	6	Surr	4	4	7.8	4	19.8	R	29	5	7.7	MMS	TS	F 7/23
RF01A /	7	Surr	4	4	7.9	4	19.8	R	28	5	7.8			CR 7/24
RF01A /	8	Surr	4	4	7.6	4	20.1	1	28	1	8.0		BH	BH 7/25
RF01A /	9	Surr	4	4	8.0	4	20.0	1	28	1	8.0	BH		BH 7/26
RF01A /	10	Surr	4	4	7.9	4	19.0	1	27	1	8.1		BH	BH 7/27
RF01A /	11	Surr	4	4	7.6	4	19.9	1	27	1	7.8			CR 7/28
RF01A /	12	Surr	4	4	7.8	4	19.8	1	27	1	7.9	TS	TS	TS 7/29
RF01A /	13	Surr	4	4	7.3	4	19.7	1	28	1	7.7			CR 7/30
RF01A /	14	Surr	4	4	7.5	4	19.7	1	28	1	7.7		CR	CR 7/31
RF01A /	15	Surr	4	4	7.5	4	19.9	1	27	1	7.8	TS		CR 8/1
RF01A /	16	Surr	4	4	7.5	4	20.0	1	27	1	7.8		TS	TS 8/2
RF01A /	17	Surr	4	4	7.7	4	19.6	1	28	1	7.8			F 8/3
RF01A /	18	Surr	4	4	7.7	4	20.0	1	28	1	8.0	BH	BH	BH 8/4
RF01A /	19	Surr	4	4	7.7	4	19.9	1	28	1	7.7			MP 8/5
RF01A /	20	Surr	4	4	7.6	4	20.0	1	28	1	7.9			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. REC'DR./HOBOW#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA									
	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE						
				meter	>6.0 D.O. mg/L	meter	°C	meter	ppt	meter	unit									
RF02A /	0	Surr	49	4	7.8	4	20.2	R	27	5	7.8	CR	CR 7/17							
RF02A /	1	Surr	49	4	7.8	4	20.1	R	29	5	8.0	MMB	MMB 7/18							
RF02A /	2	Surr	49	4	7.7	4	20.3	R	29	5	8.1	CR	CR 7/19							
RF02A /	3	Surr	49	4	7.7	4	20.2	R	28	5	8.2	CR	CR 7/20							
RF02A /	4	Surr	49	4	7.8	4	19.0	R	28	5	8.2	A	A 7/21							
RF02A /	5	Surr	49	4	7.6	4	20.2	R	28	5	8.2		TS 7/22							
RF02A /	6	Surr	49	4	7.8	4	20.0	R	28	5	8.2	TS	A 7/23							
RF02A /	7	Surr	49	4	8.0	4	19.7	R	27	5	8.2		CR 7/24							
RF02A /	8	Surr	49	4	7.6	4	20.3	1	28	1	8.1	BH	BH 7/25							
RF02A /	9	Surr	49	4	7.8	4	20.3	1	28	1	8.2		BH 7/26							
RF02A /	10	Surr	49	4	7.7	4	19.7	1	28	1	8.2	BH	BH 7/27							
RF02A /	11	Surr	49	4	7.7	4	20.1	1	27	1	8.1		CR 7/28							
RF02A /	12	Surr	49	4	7.6	4	20.3	1	27	1	8.1	TS	TS 7/29							
RF02A /	13	Surr	49	4	7.7	4	20.2	1	28	1	8.1		CR 7/30							
RF02A /	14	Surr	49	4	7.7	4	20.1	1	28	1	8.0	CR	CR 7/31							
RF02A /	15	Surr	49	4	7.6	4	20.3	1	28	1	8.1		CR 8/1							
RF02A /	16	Surr	49	4	7.7	4	20.3	1	28	1	8.1	TS	TS 8/2							
RF02A /	17	Surr	49	4	7.7	4	19.4	1	28	1	8.0		TS 8/3							
RF02A /	18	Surr	49	4	7.7	4	20.2	1	28	1	8.0	BH	BH 8/4							
RF02A /	19	Surr	49	4	7.7	4	20.3	1	28	1	8.0		MP 8/5							
RF02A /	20	Surr	49	4	7.7	4	20.2	1	28	1	8.0		BH 8/6							

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
RF03A /	0	Surr	131	4	7.7	4	20.1	R	28	S	7.9		CR	CR 7/17
RF03A /	1	Surr	131	4	7.8	4	20.1	R	30	S	8.0			MMB 7/18
RF03A /	2	Surr	131	4	7.0	4	20.4	R	29	S	8.1		CR	CR 7/19
RF03A /	3	Surr	131	4	7.6	4	20.3	R	28	S	8.2	CP		CR 7/20
RF03A /	4	Surr	131	4	7.7	4	18.9	R	28	S	8.6		f	f 7/21
RF03A /	5	Surr	131	4	7.6	4	20.3	R	28	S	8.2			TS 7/22
RF03A /	6	Surr	131	4	7.8	4	20.1	R	29	S	8.3	MMB	TS	f 7/23
RF03A /	7	Surr	131	4	7.9	4	19.7	R	28	S	8.3			CR 7/24
RF03A /	8	Surr	131	4	7.6	4	20.3	R	29	1	8.5		BH	BH 7/25
RF03A /	9	Surr	131	4	7.7	4	20.3	1	29	1	8.6		BH	BH 7/26
RF03A /	10	Surr	131	4	7.6	4	19.7	1	28	1	8.4		BH	BH 7/27
RF03A /	11	Surr	131	4	7.5	4	20.4	1	28	1	8.4			CR 7/28
RF03A /	12	Surr	131	4	7.6	4	20.3	1	28	1	8.3	TS	TS	TS 7/29
RF03A /	13	Surr	131	4	7.7	4	20.2	1	28	1	8.3			CR 7/30
RF03A /	14	Surr	131	4	7.6	4	20.2	1	28	1	8.2		CR	CR 7/31
RF03A /	15	Surr	131	4	7.5	4	20.4	1	28	1	8.3	TS		CR 8/1
RF03A /	16	Surr	131	4	7.5	4	20.3	1	28	1	8.3		TS	TS 8/2
RF03A /	17	Surr	131	4	7.7	4	19.4	1	28	1	8.2		TS	TS 8/3
RF03A /	18	Surr	131	4	7.6	4	20.1	1	28	1	8.2	BH	BH	BH 8/4
RF03A /	19	Surr	131	4	7.7	4	20.3	1	28	1	8.2			MP 8/5
RF03A /	20	Surr	131	4	7.7	4	20.2	1	28	1	8.2			BH 8/6

DWC 725008



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELD ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
IH03A/	0	Surr	110	4	6.7	4	20.2	R	28	5	7.8		CR	CR 7/17
IH03A/	1	Surr	110	4	7.3	4	20.2	R	29	5	7.9			MWB 7/18
IH03A/	2	Surr	110	4	7.2	4	20.4	R	29	5	8.0		CR	CR 7/19
IH03A/	3	Surr	110	4	7.7	4	20.2	R	29	5	8.2			CR 7/20
IH03A/	4	Surr	110	4	7.8	4	18.9	R	29	5	8.2		♀	♀ 7/20
IH03A/	5	Surr	110	4	7.6	4	20.2	R	29	5	8.3			B 7/22
IH03A/	6	Surr	110	4	7.7	4	20.0	R	29	5	8.3		TS	↓ 7/23
IH03A/	7	Surr	110	4	8.0	4	19.6	R	28	5	8.3			CR 7/24
IH03A/	8	Surr	110	4	7.4	4	20.3	1	29	1	8.5		BK	BK 7/25
IH03A/	9	Surr	110	4	7.7	4	20.1	1	28	1	8.5			BH 7/26
IH03A/	10	Surr	110	4	7.7	4	19.7	1	28	1	8.5		BH	BH 7/27
IH03A/	11	Surr	110	4	7.5	4	20.4	1	28	1	8.5			CR 7/28
IH03A/	12	Surr	110	4	7.6	4	20.2	1	28	1	8.4		TS	TS 7/29
IH03A/	13	Surr	110	4	7.7	4	20.1	1	28	1	8.4			CR 7/30
IH03A/	14	Surr	110	4	7.7	4	20.1	1	28	1	8.3		CR	CR 7/31
IH03A/	15	Surr	110	4	7.5	4	20.3	1	28	1	8.3			CR 8/1
IH03A/	16	Surr	110	4	7.5	4	20.2	1	28	1	8.3		TS	TS 8/2
IH03A/	17	Surr	110	4	7.7	4	19.6	1	28	1	8.2			TS 8/3
IH03A/	18	Surr	110	4	7.6	4	20.1	1	28	1	8.1		BH	BH 8/4
IH03A/	19	Surr	110	4	7.6	4	20.2	1	28	1	8.1			MP 8/5
IH03A/	20	Surr	110	4	7.7	4	20.2	1	28	1	8.2			BH 8/6

① WC 7.26.08 BH

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA									
	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE						
				meter	> 6.0 D.O.	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0									
IH05A /	0	Surr	7	4	7.6	4	20.1	R	28	5	7.8		CR	CR 7/17						
IH05A /	1	Surr	7	4	7.6	4	19.8	R	30	5	7.6			MMB 7/18						
IH05A /	2	Surr	7	4	7.5	4	20.3	R	29	5	7.9		CR	CR 7/19						
IH05A /	3	Surr	7	4	7.6	4	20.1	R	28	5	8.0	CR		CR 7/20						
IH05A /	4	Surr	7	4	7.8	4	18.7	R	28	5	7.9			J 7/21						
IH05A /	5	Surr	7	4	7.5	4	20.2	R	28	5	8.1			TS 7/22						
IH05A /	6	Surr	7	4	7.7	4	19.9	R	28	5	8.1	MMB	TS	J 7/22						
IH05A /	7	Surr	7	4	7.8	4	19.9	R	27	5	8.2			CR 7/24						
IH05A /	8	Surr	7	4	7.8	4	19.3	1	28	1	8.3		BH	BH 7/25						
IH05A /	9	Surr	7	4	8.2	4	20.0	1	28	1	8.4			BH 7/26						
IH05A /	10	Surr	7	4	7.7	4	19.6	1	28	1	8.3		BH	BH 7/27						
IH05A /	11	Surr	7	4	7.4	4	20.1	1	27	1	8.1			CR 7/28						
IH05A /	12	Surr	7	4	7.6	4	20.1	1	27	1	8.0	TS	TS	TS 7/29						
IH05A /	13	Surr	7	4	7.5	4	20.1	1	28	1	8.0			CR 7/30						
IH05A /	14	Surr	7	4	8.3 7.6	4	20.0	1	28	1	8.0		CR	CR 7/31						
IH05A /	15	Surr	7	4	7.6	4	20.1	1	28	1	8.0	TS		CR 8/1						
IH05A /	16	Surr	7	4	7.5	4	20.2	1	28	1	8.0		TS	TS 8/2						
IH05A /	17	Surr	7	4	7.7	4	19.6	1	28	1	7.9			TS 8/3						
IH05A /	18	Surr	7	4	7.7	4	20.0	1	28	1	8.0	BH	BH	BH 8/4						
IH05A /	19	Surr	7	4	7.6	4	20.2	1	28	1	8.0			MP 8/5						
IH05A /	20	Surr	7	4	7.6	4	20.2	1	28	1	8.0			BH 8/6						

OMeter changed CR 7/31

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				>6.0	D.O.	meter	mg/L	meter	°C	meter	ppt			
IH06A/	0	Surr	15	4	7.6	4	20.1	R	28	S	7.9		CR	CR 7/10
IH06A/	1	Surr	15	4	7.6	4	20.1	R	29	S	8.0			MMB 7/18
IH06A/	2	Surr	15	4	7.6	4	20.4	R	28	S	8.1		CR	CR 7/19
IH06A/	3	Surr	15	4	7.7	4	20.2	R	28	S	8.3	CR		CR 7/20
IH06A/	4	Surr	15	4	7.7	4	19.0	R	28	S	8.2		A	A 7/21
IH06A/	5	Surr	15	4	7.5	4	20.2	R	28	S	8.3			TS 7/22
IH06A/	6	Surr	15	4	7.6	4	20.0	R	28	S	8.4	MMB	TS	TS 7/23
IH06A/	7	Surr	15	4	7.8	4	19.8	R	27	S	8.4			CR 7/24
IH06A/	8	Surr	15	4	7.6	4	20.2	R	28	1	8.3		BH	BH 7/25
IH06A/	9	Surr	15	4	7.7	4	20.3	1	28	1	8.4			BH 7/26
IH06A/	10	Surr	15	4	7.7	4	19.6	1	28	1	8.3		BH	BH 7/27
IH06A/	11	Surr	15	4	7.5	4	20.4	1	27	1	8.2			CR 7/28
IH06A/	12	Surr	15	4	7.7	4	19.9	1	27	1	8.1	TS	TS	TS 7/29
IH06A/	13	Surr	15	4	7.5	4	20.2	1	28	1	7.9			CR 7/30
IH06A/	14	Surr	15	4	7.6	4	20.1	1	28	1	7.9		CR	CR 7/31
IH06A/	15	Surr	15	4	7.5	4	20.3	1	28	1	8.0	TS		CR 8/1
IH06A/	16	Surr	15	4	7.5	4	20.2	1	28	1	8.0		TS	TS 8/2
IH06A/	17	Surr	15	4	7.6	4	19.6	1	28	1	7.9			TS 8/3
IH06A/	18	Surr	15	4	7.7	4	20.2	1	28	1	7.9	BH	BH	BH 8/4
IH06A/	19	Surr	15	4	7.8	4	19.7	1	28	1	7.9			MP 8/5
IH06A/	20	Surr	15	4	7.6	4	20.3	1	28	1	7.9			BH 8/6

①MC 7.25.06 BH

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
KP01A /	0	Surr	95	4	7.8	4	20.0	R	28	5	7.8		CR	CR 7/17
KP01A /	1	Surr	95	4	7.7	4	20.2	R	29	5	8.0			NMB 7/18
KP01A /	2	Surr	95	4	7.5	4	20.2	R	29	5	8.2		CR	CR 7/19
KP01A /	3	Surr	95	4	7.6	4	20.2	R	28	5	8.3	CR		CR 7/20
KP01A /	4	Surr	95	4	7.9	4	18.9	R	29	5	8.1		J	J 7/21
KP01A /	5	Surr	95	4	7.6	4	20.2	R	29	5	8.3			B 7/22
KP01A /	6	Surr	95	4	7.7	4	19.9	R	29	5	8.2	NMB	TS	J 7/23
KP01A /	7	Surr	95	4	7.8	4	19.8	R	28	5	8.4			CR 7/24
KP01A /	8	Surr	95	4	7.5	4	20.2	1	29	1	8.6		BH	BH 7/25
KP01A /	9	Surr	95	4	7.7	4	20.3	1	29	1	8.7			BH 7/25/26
KP01A /	10	Surr	95	4	7.6	4	19.7	1	28	1	8.6		BH	BH 7/26/27
KP01A /	11	Surr	95	4	7.5	4	20.3	1	28	1	8.5			CR 7/28
KP01A /	12	Surr	95	4	7.6	4	20.2	1	28	1	8.4	B	TS	TS 7/29
KP01A /	13	Surr	95	4	7.7	4	20.0	1	28	1	8.3			CR 7/30
KP01A /	14	Surr	95	4	7.6	4	20.1	1	28	1	8.2		CR	CR 7/31
KP01A /	15	Surr	95	4	7.5	4	20.3	1	28	1	8.3	TS		CR 8/1
KP01A /	16	Surr	95	4	7.5	4	20.5	1	28	1	8.3			TS 8/2
KP01A /	17	Surr	95	4	7.6	4	19.4	1	28	1	8.1			B 8/3
KP01A /	18	Surr	95	4	7.6	4	20.1	1	28	1	8.1	BH	BH	BH 8/4
KP01A /	19	Surr	95	4	7.6	4	20.0	1	28	1	8.2			MP 8/5
KP01A /	20	Surr	95	4	7.7	4	20.2	1	28	1	8.1			BH 8/6

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20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./JOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	WATER QUALITY DATA										DO (mg/L) >6.0	TEMP (C) 20 ± 1	SALINITY (ppt) 28 ± 1	pH 8.0 ± 1.0	WATER RENEWAL	Feeding	TECH/DATE
	DAY	REP	JAR	DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH	WATER RENEWAL	Feeding	TECH/DATE							
	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter							
KP02A/	0	Surr	8	4	8.0	4	20.0	R	28	5	7.8	CR	CR 7/17				
KP02A/	1	Surr	8	4	7.6	4	20.0	R	30	5	7.9		MMMS 7/18				
KP02A/	2	Surr	8	4	7.5	4	20.3	R	29	5	7.9	CR	CR 7/19				
KP02A/	3	Surr	8	4	7.5	4	20.2	R	28	5	8.1	CR	CR 7/20				
KP02A/	4	Surr	8	4	7.7	4	19.0	R	28	5	8.0	✓	✓ 7/21				
KP02A/	5	Surr	8	4	7.2	4	20.2	R	28	5	8.1		TS 7/22				
KP02A/	6	Surr	8	4	7.6	4	19.8	R	28	5	7.6	TS	✓ 7/23				
KP02A/	7	Surr	8	4	7.8	4	19.7	R	27	5	8.2		CR 7/24				
KP02A/	8	Surr	8	4	7.7	4	19.3	1	29	1	8.4	BH	BH 7/25				
KP02A/	9	Surr	8	4	7.8	4	19.6	1	29	1	8.5		BH 7/26				
KP02A/	10	Surr	8	4	7.6	4	19.6	1	28	1	8.4	BH	BH 7/27				
KP02A/	11	Surr	8	4	7.3	4	20.2	1	28	1	8.3		CR 7/28				
KP02A/	12	Surr	8	4	7.6	4	20.0	1	28	1	8.2	TS	TS 7/29				
KP02A/	13	Surr	8	4	7.6	4	20.0	1	28	1	8.2		CR 7/30				
KP02A/	14	Surr	8	4	7.6	4	19.9	1	28	1	8.1	CR	CR 7/31				
KP02A/	15	Surr	8	4	7.5	4	20.2	1	28	1	8.2		CR 8/1				
KP02A/	16	Surr	8	4	7.5	4	20.2	1	28	1	8.2	TS	TS 8/2				
KP02A/	17	Surr	8	4	7.6	4	19.6	1	28	1	8.0		TS 8/3				
KP02A/	18	Surr	8	4	7.6	4	20.1	1	28	1	8.1	BH	BH 8/4				
KP02A/	19	Surr	8	4	7.7	4	20.1	1	28	1	8.0		MP 8/5				
KP02A/	20	Surr	8	4	7.6	4	20.2	1	28	1	8.0		BH 8/6				

0 WC 7/23/08 ✓

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA									
	DAY	REP	JAR	DO (mg/L)	TEMP (C)	TEMP	SALINITY	pH	WATER RENEWAL	Feeding	TECH/DATE	DO (mg/L)	TEMP (C)	TEMP	SALINITY	pH	WATER RENEWAL	Feeding	TECH/DATE	
				>6.0	20 ± 1	meter	28 ± 1	meter				meter	meter		meter	meter				
KP03A /	0	Surr	148	4	7.7	4	20.4	R	28	5	8.0	CR	CR	7/17						
KP03A /	1	Surr	148	4	7.7	4	20.3	R	29	5	8.0	MMB	7/18							
KP03A /	2	Surr	148	4	7.5	4	20.3	R	29	5	8.1	CR	CR	7/19						
KP03A /	3	Surr	148	4	7.7	4	20.3	R	28	5	8.2	CR	CR	7/20						
KP03A /	4	Surr	148	4	7.9	4	18.0	R	29	5	8.2	J	J	7/21						
KP03A /	5	Surr	148	4	7.7	4	20.3	R	29	5	8.3	TS	TS	7/22						
KP03A /	6	Surr	148	4	7.8	4	20.1	R	29	5	8.3	MMB	MMB	7/23						
KP03A /	7	Surr	148	4	7.9	4	19.8	R	28	5	8.2	CR	CR	7/24						
KP03A /	8	Surr	148	4	8.0	4	19.8	1	28	1	8.2	BH	BH	7/25						
KP03A /	9	Surr	148	4	7.8	4	20.3	1	28	1	8.4	BH	BH	7/26						
KP03A /	10	Surr	148	4	7.6	4	19.7	1	28	1	8.3	BH	BH	7/27						
KP03A /	11	Surr	148	4	7.6	4	20.4	1	27	1	8.2	CR	CR	7/28						
KP03A /	12	Surr	148	4	7.6	4	20.4	1	27	1	8.2	TS	TS	7/29						
KP03A /	13	Surr	148	4	7.6	4	20.2	1	28	1	8.2	CR	CR	7/30						
KP03A /	14	Surr	148	4	7.6	4	20.3	1	28	1	8.1	CR	CR	7/31						
KP03A /	15	Surr	148	4	7.5	4	20.4	1	28	1	8.2	TS	TS	8/1						
KP03A /	16	Surr	148	4	7.5	4	20.3	1	28	1	8.2	TS	TS	8/2						
KP03A /	17	Surr	148	4	7.7	4	19.6	1	28	1	8.1	TS	TS	8/3						
KP03A /	18	Surr	148	4	7.6	4	19.8	1	28	1	8.1	BH	BH	8/4						
KP03A /	19	Surr	148	4	7.7	4	20.3	1	28	1	8.2	MP	MP	8/5						
KP03A /	20	Surr	148	4	7.7	4	20.3	1	28	1	8.2	BH	BH	8/6						

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA				Feeding	WATER RENEWAL	TECH/DATE
	DAY	REP	JAR	DO (mg/L) >6.0	TEMP (C)		SALINITY (ppt)		pH		meter	unit	meter	pH			
					meter	D.O.	meter	°C	meter	ppt							
MA01A /	0	Surr	122	4	6.6	4	20.2	R	28	5	7.8	CR	CR 7/17				
MA01A /	1	Surr	122	4	7.3	4	20.2	R	30	5	7.9	MMB	MMB 7/18				
MA01A /	2	Surr	122	4	7.3	4	20.3	R	29	5	8.0	CR	CR 7/19				
MA01A /	3	Surr	122	4	7.5	4	20.2	R	28	5	8.2	CR	CR 7/20				
MA01A /	4	Surr	122	4	7.5	4	19.0	R	28	5	8.1	L	L 7/21				
MA01A /	5	Surr	122	4	7.3	4	20.3	R	28	5	8.3	TS	TS 7/22				
MA01A /	6	Surr	122	4	7.5	4	20.1	R	28	5	8.3	MMB	L 7/23				
MA01A /	7	Surr	122	4	7.7	4	19.7	R	28	5	8.3	CR	CR 7/24				
MA01A /	8	Surr	122	4	8.0	4	19.2	I	28	1	8.4	BH	BH 7/25				
MA01A /	9	Surr	122	4	7.6	4	20.3	I	28	1	8.5	BH	BH 7/26				
MA01A /	10	Surr	122	4	7.5	4	19.7	I	28	1	8.4	BH	BH 7/27				
MA01A /	11	Surr	122	4	7.4	4	20.4	I	27	1	8.3	CR	CR 7/28				
MA01A /	12	Surr	122	4	7.6	4	20.2	I	28	1	8.2	TS	TS 7/29				
MA01A /	13	Surr	122	4	7.6	4	20.2	I	28	1	8.1	CR	CR 7/30				
MA01A /	14	Surr	122	4	7.5	4	20.2	I	28	1	8.0	CR	CR 7/31				
MA01A /	15	Surr	122	4	7.4	4	20.4	I	28	1	8.1	TS	CR 8/1				
MA01A /	16	Surr	122	4	7.5	4	20.6	I	28	1	8.1	TS	TS 8/2				
MA01A /	17	Surr	122	4	7.6	4	19.6	I	28	1	8.0	TS	TS 8/3				
MA01A /	18	Surr	122	4	7.6	4	20.2	I	28	1	7.9	BH	BH 8/4				
MA01A /	19	Surr	122	4	7.6	4	20.2	I	28	1	8.0	MP	MP 8/5				
MA01A /	20	Surr	122	4	7.6	4	20.2	I	28	1	8.0	BH	BH 8/6				

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Nearthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
BL01A/	0	Surr	58	4	7.2	4	20.2	R	27	5	8.0		CR	CR 7/17
BL01A/	1	Surr	58	4	7.4	4	20.2	R	30	5	8.0			MMB 7/18
BL01A/	2	Surr	58	4	7.4	4	20.4	R	29	5	8.1		CR	CR 7/19
BL01A/	3	Surr	58	4	7.4	4	20.2	R	28	5	8.2	CR		CR 7/20
BL01A/	4	Surr	58	4	7.5	4	19.0	R	28	5	8.1		✓	✓ 7/21
BL01A/	5	Surr	58	4	7.5	4	20.2	R	28	5	8.6			TS 7/22
BL01A/	6	Surr	58	4	7.5	4	19.9	R	28	5	8.3	MMB	TS	✓ 7/23
BL01A/	7	Surr	58	4	7.8	4	19.7	R	27	5	8.5			CR 7/24
BL01A/	8	Surr	58	4	7.7	4	20.3	1	28	1	8.6		BH	BH 7/25
BL01A/	9	Surr	58	4	7.7	4	20.3	1	29	1	8.7			BH 7/26
BL01A/	10	Surr	58	4	7.7	4	19.8	1	28	1	8.5		BH	BH 7/27
BL01A/	11	Surr	58	4	7.6	4	20.4	1	28	1	8.4			CR 7/28
BL01A/	12	Surr	58	4	7.6	4	20.3	1	27	1	8.3	TS	TS	TS 7/29
BL01A/	13	Surr	58	4	7.7	4	20.1	1	28	1	8.3			CR 7/30
BL01A/	14	Surr	58	4	7.6	4	20.3	1	28	1	8.2		CR	CR 7/31
BL01A/	15	Surr	58	4	7.6	4	20.4	1	28	1	8.3	TS		CR 8/1
BL01A/	16	Surr	58	4	7.6	4	20.3	1	28	1	8.3			TS 8/2
BL01A/	17	Surr	58	4	7.7	4	19.7	1	28	1	8.1			TS 8/3
BL01A/	18	Surr	58	4	7.7	4	20.2	1	28	1	8.2	BH	BH	BH 8/4
BL01A/	19	Surr	58	4	7.7	4	20.3	1	28	1	8.1			MP 8/5
BL01A/	20	Surr	58	4	7.7	4	20.2	1	28	1	8.1			

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
CO02A/	0	Surr	9	4	7.7	4	20.2	R	28	S	7.8		UR	CR 7/17
CO02A/	1	Surr	9	4	7.6	4	20.0	R	27	S	8.0			NMB 7/18
CO02A/	2	Surr	9	4	7.5	4	20.3	R	28	S	8.0		CR	CR 7/19
CO02A/	3	Surr	9	4	7.6	4	20.2	R	28	S	8.2			CR 7/20
CO02A/	4	Surr	9	4	7.7	4	18.9	R	28	S	9.1			A 7/21
CO02A/	5	Surr	9	4	7.5	4	20.2	R	28	S	8.3			TS 7/22
CO02A/	6	Surr	9	4	7.5	4	19.9	R	28	S	8.3		NMB	A 7/23
CO02A/	7	Surr	9	4	7.7	4	19.7	R	27	S	8.5			CR 7/24
CO02A/	8	Surr	9	4	7.4	4	20.1	I	28	I	8.8		BH	BH 7/25
CO02A/	9	Surr	9	4	7.7	4	19.7	I	29	I	8.9			BH 7/26
CO02A/	10	Surr	9	4	7.7	4	19.1	I	28	I	8.8		BH	BH 7/27
CO02A/	11	Surr	9	4	7.4	4	20.1	I	27	I	8.7			CR 7/28
CO02A/	12	Surr	9	4	7.5	4	20.0	I	27	I	8.6		T	TS 7/29
CO02A/	13	Surr	9	4	7.5	4	20.2	I	28	I	8.6			CR 7/30
CO02A/	14	Surr	9	4	7.6	4	19.9	I	28	I	8.5		CR	CR 7/31
CO02A/	15	Surr	9	4	7.5	4	20.2	I	28	I	8.5			CR 8/1
CO02A/	16	Surr	9	4	7.5	4	20.3	I	28	I	8.5		TS	TS 8/2
CO02A/	17	Surr	9	4	7.6	4	19.4	I	28	I	8.3			TS 8/3
CO02A/	18	Surr	9	4	7.6	4	20.1	I	28	I	8.3		BH	BH 8/4
CO02A/	19	Surr	9	4	8.3	4	20.1	I	28	I	8.3			MP 8/5
CO02A/	20	Surr	9	4	7.6	4	20.2	I	28	I	8.3			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
DO03A /	0	Surr	45	4	7.7	4	20.2	R	28	S	7.8		CR	CR 7/17
DO03A /	1	Surr	45	4	7.7	4	20.0	R	29	S	7.9			MMBS 7/18
DO03A /	2	Surr	45	4	7.6	4	20.3	R	29	S	8.1		CR	CR 7/19
DO03A /	3	Surr	45	4	7.7	4	20.2	R	28	S	8.2	CR		CR 7/20
DO03A /	4	Surr	45	4	7.9	4	18.9	R	28	S	8.2			J 7/21
DO03A /	5	Surr	45	4	7.6	4	20.2	R	28	S	8.3			B 7/22
DO03A /	6	Surr	45	4	7.7	4	20.0	R	28	S	8.2	MMBS	TS	J 7/23
DO03A /	7	Surr	45	4	7.9	4	19.8	R	27	S	8.2			CR 7/24
DO03A /	8	Surr	45	4	7.6	4	20.3	I	28	I	8.1		BH	BH 7/25
DO03A /	9	Surr	45	4	7.8	4	20.2	I	28	I	8.3	BH		BH 7/26
DO03A /	10	Surr	45	4	7.7	4	19.7	I	28	I	8.3		BH	BH 7/27
DO03A /	11	Surr	45	4	7.6	4	20.3	I	27	I	8.3			CR 7/28
DO03A /	12	Surr	45	4	7.6	4	20.3	I	27	I	8.2	TS	TS	TS 7/29
DO03A /	13	Surr	45	4	7.7	4	20.2	I	28	I	8.3			CR 7/30
DO03A /	14	Surr	45	4	7.7	4	20.1	I	28	I	8.2		CR	CR 7/31
DO03A /	15	Surr	45	4	7.6	4	20.3	I	28	I	8.3	TS		CR 8/1
DO03A /	16	Surr	45	4	7.7	4	20.4	I	28	I	8.3		TS	TS 8/2
DO03A /	17	Surr	45	4	7.7	4	19.6	I	28	I	8.2			TS 8/3
DO03A /	18	Surr	45	4	7.7	4	20.1	I	28	I	8.2	BH	BH	BH 8/4
DO03A /	19	Surr	45	4	7.7	4	20.1	I	28	I	8.2			MP 8/5
DO03A /	20	Surr	45	4	7.7	4	20.2	I	28	I	8.2			BH 8/6

**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Nearthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA														
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE		
				meter	>6.0 D.O.	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0					
DO04A/	0	Surr	62	4	7.7	4	20.3	R	28	S	8.0		CR	CR 7/17		
DO04A/	1	Surr	62	4	7.7	4	20.1	R	30	S	8.1			NMB 7/18		
DO04A/	2	Surr	62	4	7.5	4	20.3	R	29	S	8.1		CR	CR 7/19		
DO04A/	3	Surr	62	4	7.7	4	20.3	R	28	S	8.2	CR		CR 7/20		
DO04A/	4	Surr	62	4	7.8	4	19.0	R	28	S	8.3		L	L 7/24		
DO04A/	5	Surr	62	4	7.5	4	20.2	R	28	S	8.5			B	B 7/22	
DO04A/	6	Surr	62	4	7.7	4	19.9	R	28	S	8.3	MMP	JS	J 7/23		
DO04A/	7	Surr	62	4	7.9	4	20.0	R	27	S	8.2			CR	CR 7/24	
DO04A/	8	Surr	62	4	7.6	4	20.3	I	28	I	8.2		BH	BH 7/25		
DO04A/	9	Surr	62	4	7.8	4	20.2	I	28	I	8.3			BH	BH 7/26	
DO04A/	10	Surr	62	4	7.8	4	19.3	I	28	I	8.3		BH	BH 7/27		
DO04A/	11	Surr	62	4	7.6	4	20.4	I	27	I	8.2			CR	CR 7/28	
DO04A/	12	Surr	62	4	7.6	4	20.3	I	27	I	8.2			B	B 7/29	
DO04A/	13	Surr	62	4	7.8	4	20.0	I	28	I	8.1				CR	CR 7/30
DO04A/	14	Surr	62	4	7.7	4	20.2	I	28	I	8.1		CR		CR 7/31	
DO04A/	15	Surr	62	4	7.6	4	20.4	I	28	I	8.2			B	CR 8/1	
DO04A/	16	Surr	62	4	7.6	4	20.3	I	28	I	8.2				B	B 8/2
DO04A/	17	Surr	62	4	7.7	4	19.6	I	28	I	8.1				B	B 8/3
DO04A/	18	Surr	62	4	7.7	4	20.1	I	28	I	8.1		BH		BH 8/4	
DO04A/	19	Surr	62	4	7.7	4	20.3	I	28	I	8.1				MP	MP 8/5
DO04A/	20	Surr	62	4	7.7	4	20.3	I	28	I	8.1				BH	BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
DO05A /	0	Surr	96	4	6.8	4	20.1	R	28	S	7.8		CR	CR 7/17
DO05A /	1	Surr	96	4	7.3	4	20.2	R	29	S	7.9			MMB 7/18
DO05A /	2	Surr	96	4	7.5	4	20.4	R	29	S	8.1		CR	CR 7/19
DO05A /	3	Surr	96	4	7.6	4	20.2	R	28	S	8.3	CR		CR 7/20
DO05A /	4	Surr	96	4	7.7	4	19.0	R	28	S	8.2		A	A 7/21
DO05A /	5	Surr	96	4	7.6	4	20.2	R	28	S	8.3			TS 7/22
DO05A /	6	Surr	96	4	7.8	4	19.9	R	28	S	8.3			A 7/23
DO05A /	7	Surr	96	4	7.8	4	19.8	R	28	S	8.3			CR 7/24
DO05A /	8	Surr	96	4	7.6	4	20.2	1	28	1	8.3	BH	BH	BH 7/25
DO05A /	9	Surr	96	4	7.7	4	20.0	1	28	1	8.7	BH		BH 7/26
DO05A /	10	Surr	96	4	7.7	4	19.5	1	28	1	8.3		BH	BH 7/27
DO05A /	11	Surr	96	4	7.5	4	20.3	1	27	1	8.3			CR 7/28
DO05A /	12	Surr	96	4	7.7	4	20.2	1	28	1	8.3	TS	TS	TS 7/29
DO05A /	13	Surr	96	4	7.7	4	20.1	1	28	1	8.3			CR 7/30
DO05A /	14	Surr	96	4	7.7	4	20.2	1	28	1	8.2		CR	CR 7/31
DO05A /	15	Surr	96	4	7.6	4	20.3	1	28	1	8.4	TS		CR 8/1
DO05A /	16	Surr	96	4	7.6	4	20.2	1	28	1	8.3		TS	TS 8/2
DO05A /	17	Surr	96	4	7.7	4	19.6	1	28	1	8.3			TS 8/3
DO05A /	18	Surr	96	4	7.6	4	20.1	1	28	1	8.3	BH	BH	BH 8/4
DO05A /	19	Surr	96	4	7.7	4	20.1	1	28	1	8.3			MP 8/5
DO05A /	20	Surr	96	4	7.7	4	20.2	1	28	1	8.4			BH 8/6

WC 7.26.08 BH

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				>6.0	D.O.	meter	mg/L	meter	°C	meter	ppt			
EG01AT E107A	0	Surr	90	4	7.9	4	20.0	R	27	S	7.8		CR	CR 7/17
EC01A+	1	Surr	90	4	7.8	4	20.1	R	28	S	8.1			MMMB 7/18
EG01AT	2	Surr	90	4	7.5	4	20.3	R	28	S	8.2		CR	CR 7/19
EG01AT	3	Surr	90	4	7.7	4	20.1	R	29	S	8.4	CR		CR 7/20
EC01AT	4	Surr	90	4	7.8	4	18.9	R	29	S	8.1			✓ 7/21
EC01AT	5	Surr	90	4	7.6	4	20.2	R	29	S	8.3			TS 7/22
EG01AT	6	Surr	90	4	7.6	4	19.7	R	28	S	8.2	MMMB	TS	✓ 7/23
EC01AT	7	Surr	90	4	7.7	4	19.7	R	28	S	8.2			CR 7/24
EC01AT	8	Surr	90	4	7.6	4	20.1	1	28	1	8.2		MM	BH 7/25
EC01AT	9	Surr	90	4	7.7	4	20.2	1	28	1	8.6	BH		BH 7/26
EC01A+	10	Surr	90	4	7.5	4	19.5	1	28	1	8.6		BH	BH 7/27
EC01A+	11	Surr	90	4	7.5	4	20.3	1	27	1	8.6			CR 7/28
EC01AT	12	Surr	90	4	7.7	4	20.0	1	28	1	8.5	TS	TS	TS 7/29
EC01AT	13	Surr	90	4	7.6	4	20.2	1	28	1	8.5			CR 7/30
EC01AT	14	Surr	90	4	7.6	4	20.2	1	28	1	8.4		CR	CR 7/31
EG01A+	15	Surr	90	4	7.5	4	20.3	1	28	1	8.4	TS		CR 8/1
EG01A+	16	Surr	90	4	7.5	4	20.2	1	28	1	8.4		TS	TS 8/2
EC01A+	17	Surr	90	4	7.6	4	19.6	1	28	1	8.2			TS 8/3
EC01A+	18	Surr	90	4	7.6	4	20.1	1	28	1	8.2	BH	BH	BH 8/4
EG01A+	19	Surr	90	4	7.6	4	20.0	1	28	1	8.1			MP 8/5
EC01A+	20	Surr	90	4	7.7	4	20.2	1	28	1	8.1			BH 8/6



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		PH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
EC04A /	0	Surr	29	4	7.1	4	20.2	R	28	5	7.8		UR	CR 7/17
EC04A /	1	Surr	29	4	7.7	4	20.1	R	29	5	7.9			MMB 7/18
EC04A /	2	Surr	29	4	7.6	4	20.4	R	29	5	8.1		CR	CR 7/19
EC04A /	3	Surr	29	4	7.6	4	20.2	R	28	5	8.3	CR		CR 7/20
EC04A /	4	Surr	29	4	7.8	4	19.9	R	28	5	8.3			A 7/21
EC04A /	5	Surr	29	4	7.6	4	20.3	R	28	5	8.4			TS 7/22
EC04A /	6	Surr	29	4	7.7	4	20.0	R	28	5	8.4	MMB	TS	A 7/23
EC04A /	7	Surr	29	4	7.8	4	20.0	R	27	5	8.3			UR 7/24
EC04A /	8	Surr	29	4	7.6	4	20.3	1	28	1	8.3		BH	BH 7/25
EC04A /	9	Surr	29	4	7.8	4	20.1	1	28	1	8.4			BH 7/26
EC04A /	10	Surr	29	4	7.6	4	19.7	1	28	1	8.3		BH	BH 7/27
EC04A /	11	Surr	29	4	7.6	4	20.3	1	27	1	8.3			UR 7/28
EC04A /	12	Surr	29	4	7.6	4	20.3	1	28	1	8.2		TS	TS 7/29
EC04A /	13	Surr	29	4	7.7	4	20.2	1	28	1	8.2			CR 7/30
EC04A /	14	Surr	29	4	7.6	4	20.2	1	28	1	8.2		CR	CR 7/31
EC04A /	15	Surr	29	4	7.6	4	20.3	1	28	1	8.3			CR 8/1
EC04A /	16	Surr	29	4	7.6	4	20.3	1	28	1	8.3			TS 8/2
EC04A /	17	Surr	29	4	7.6	4	19.4	1	28	1	8.2			TS 8/3
EC04A /	18	Surr	29	4	7.6	4	20.2	1	28	1	8.2	BH	BH	BH 8/4
EC04A /	19	Surr	29	4	7.7	4	20.2	1	28	1	8.2			MP 8/5
EC04A /	20	Surr	29	4	7.7	4	20.3	1	28	1	8.2			BH 8/6



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	> 6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
ED03A /	0	Surr	77	4	7.7	4	20.2	R	28	5	8.0		CR	7/17
ED03A /	1	Surr	77	4	7.7	4	20.1	R	29	5	8.0			MMB 7/18
ED03A /	2	Surr	77	4	7.5	4	20.3	R	29	5	8.2		CR	CR 7/19
ED03A /	3	Surr	77	4	7.6	4	20.2	R	28	5	8.3	CR		CR 7/20
ED03A /	4	Surr	77	4	7.7	4	19.0	R	28	5	8.3			2 7/21
ED03A /	5	Surr	77	4	7.5	4	20.2	R	28	5	8.5			TS 7/22
ED03A /	6	Surr	77	4	7.7	4	19.9	R	28	5	8.4	MMB	TS	2 7/23
ED03A /	7	Surr	77	4	7.9	4	19.8	R	28	5	8.4			CR 7/24
ED03A /	8	Surr	77	4	7.6	4	20.2	1	28	1	8.4		BH	BH 7/25
ED03A /	9	Surr	77	4	7.7	4	20.3	1	29	1	8.5			BH 7/26
ED03A /	10	Surr	77	4	7.6	4	19.7	1	28	1	8.4		BH	BH 7/27
ED03A /	11	Surr	77	4	7.5	4	20.3	1	28	1	8.3			CR 7/28
ED03A /	12	Surr	77	4	7.6	4	20.3	1	28	1	8.2	TS	TS	TS 7/29
ED03A /	13	Surr	77	4	7.7	4	20.0	1	28	1	8.2			CR 7/30
ED03A /	14	Surr	77	4	7.7	4	20.2	1	28	1	8.1		CR	CR 7/31
ED03A /	15	Surr	77	4	7.6	4	20.3	1	28	1	8.2	TS		CR 8/1
ED03A /	16	Surr	77	4	7.6	4	20.2	1	28	1	8.1		TS	TS 8/2
ED03A /	17	Surr	77	4	7.7	4	19.5	1	28	1	8.0			TS 8/3
ED03A /	18	Surr	77	4	7.6	4	20.1	1	28	1	8.0	BH	BH	BH 8/4
ED03A /	19	Surr	77	4	7.9	4	19.3	1	28	1	8.1			MP 8/5
ED03A /	20	Surr	77	4	7.7	4	20.2	1	28	1	8.0			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	%	meter	ppt	meter	unit			
ED04A/	0	Surr	82	4	5.7	4	20.2	R	28	S	7.8		UR	CR 7/17
ED04A/	1	Surr	82	4	7.2	4	20.1	R	30	S	8.1			MMMS 7/18
ED04A/	2	Surr	82	4	7.2	4	20.2	R	29	S	8.2		CR	CR 7/19
ED04A/	3	Surr	82	4	7.8	4	20.1	R	28	S	8.3	UR		CR 7/20
ED04A/	4	Surr	82	4	7.5	4	19.0	R	28	S	8.2		✓	✓ 7/21
ED04A/	5	Surr	82	4	7.5	4	20.1	R	28	S	8.4			TS 7/22
ED04A/	6	Surr	82	4	7.6	4	19.9	R	28	S	8.3	MMMS	TS	✓ 7/23
ED04A/	7	Surr	82	4	7.7	4	19.7	R	28	S	8.2			CR 7/24
ED04A/	8	Surr	82	4	7.5	4	20.0	1	29	1	8.2		BH	BH 7/25
ED04A/	9	Surr	82	4	7.7	4	20.2	1	29	1	8.3	BH		BH 7/26
ED04A/	10	Surr	82	4	7.6	4	19.6	1	28	1	8.2		BH	BH 7/27
ED04A/	11	Surr	82	4	7.5	4	20.2	1	28	1	8.2			CR 7/28
ED04A/	12	Surr	82	4	7.6	4	20.0	1	28	1	8.1	TS	TS	TS 7/29
ED04A/	13	Surr	82	4	7.4	4	19.9	1	28	1	8.0			CR 7/30
ED04A/	14	Surr	82	4	7.5	4	20.1	1	28	1	8.0		CR	CR 7/31
ED04A/	15	Surr	82	4	7.4	4	20.2	1	28	1	8.1	TS		CR 8/1
ED04A/	16	Surr	82	4	7.4	4	20.2	1	28	1	8.1			TS 8/2
ED04A/	17	Surr	82	4	7.5	4	19.3	1	28	1	8.1			TS 8/3
ED04A/	18	Surr	82	4	7.5	4	20.1	1	28	1	8.2	BH	BH	BH 8/4
ED04A/	19	Surr	82	4	7.5	4	20.2	1	28	1	8.2			MM 8/5
ED04A/	20	Surr	82	4	7.5	4	20.1	1	28	1	8.2			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				>6.0	>6.0	meter	D.O.	meter	°C	meter	ppt			
ED05A/	0	Surr	145	4	7.8	4	20.2	R	28	S	8.0		CR	CR 7/17
ED05A/	1	Surr	145	4	7.8	4	20.2	R	30	S	8.1			MMB 7/18
ED05A/	2	Surr	145	4	7.0	4	20.4	R	29	S	8.1		CR	CR 7/19
ED05A/	3	Surr	145	4	7.7	4	20.2	R	28	S	8.3	CR		CR 7/20
ED05A/	4	Surr	145	4	7.9	4	18.8	R	29	S	8.3			A 7/21
ED05A/	5	Surr	145	4	7.7	4	20.3	R	29	S	8.3			TS 7/22
ED05A/	6	Surr	145	4	7.8	4	20.1	R	28	S	8.4	MMB		J 7/23
ED05A/	7	Surr	145	4	8.0	4	19.8	R	28	S	8.2			CR 7/24
ED05A/	8	Surr	145	4	7.8	4	19.8	I	28	I	8.2		MMB	BH 7/25
ED05A/	9	Surr	145	4	7.7	4	20.3	I	28	I	8.3	BH		BH 7/26
ED05A/	10	Surr	145	4	7.6	4	19.5	I	28	I	8.3		BH	BH 7/27
ED05A/	11	Surr	145	4	7.6	4	20.4	I	27	I	8.3			CR 7/28
ED05A/	12	Surr	145	4	7.7	4	20.2	I	27	I	8.2	TS		TS 7/29
ED05A/	13	Surr	145	4	7.3	4	20.1	I	28	I	8.0			CR 7/30
ED05A/	14	Surr	145	4	7.5	4	20.3	I	28	I	8.0		CR	CR 7/31
ED05A/	15	Surr	145	4	7.5	4	20.4	I	28	I	8.2	TS		CR 8/1
ED05A/	16	Surr	145	4	7.5	4	20.2	I	28	I	8.1		TS	TS 8/2
ED05A/	17	Surr	145	4	7.8	4	19.4	I	28	I	8.2			TS 8/3
ED05A/	18	Surr	145	4	7.9	4	19.0	I	28	I	8.2	BH		BH 8/4
ED05A/	19	Surr	145	4	7.7	4	20.3	I	28	I	8.2			MP 8/5
ED05A/	20	Surr	145	4	7.6	4	20.2	I	28	I	8.3			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOR#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS		WATER QUALITY DATA										Feeding	TECH/DATE
	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL		
				meter	>6.0	meter	°C	meter	dpt	meter	unit			
MD01A /	0	Surr	155	4	7.7	4	20.4	R	28	5	8.0		CR	CR 7/17
MD01A /	1	Surr	155	4	7.5	4	20.2	R	30	5	8.0			MMS 7/18
MD01A /	2	Surr	155	4	7.5	4	20.3	R	29	5	8.1		CR	CR 7/19
MD01A /	3	Surr	155	4	7.6	4	20.2	R	29	5	8.2	CR		CR 7/20
MD01A /	4	Surr	155	4	7.8	H	18.8	R	29	5	8.2		J	J 7/21
MD01A /	5	Surr	155	4	7.5	4	20.3	R	29	5	8.2			TS 7/22
MD01A /	6	Surr	155	4	7.6	4	20.0	R	29	5	8.2	MMS	TS	J 7/23
MD01A /	7	Surr	155	4	7.9	4	19.7	R	28	5	8.2			CR 7/24
MD01A /	8	Surr	155	4	7.6	4	19.7	I	29	1	8.2		BH	BH 7/25
MD01A /	9	Surr	155	4	7.7	4	20.2	I	29	1	8.3	BH		BH 7/26
MD01A /	10	Surr	155	4	7.6	4	19.7	I	28	1	8.3		BH	BH 7/27
MD01A /	11	Surr	155	4	7.4	4	20.3	I	28	1	8.1			CR 7/28
MD01A /	12	Surr	155	4	7.5	4	20.4	I	28	1	8.2	TS	TS	TS 7/29
MD01A /	13	Surr	155	4	7.5	4	20.2	I	28	1	8.1			CR 7/30
MD01A /	14	Surr	155	4	7.6	4	20.2	I	28	1	8.1		CR	CR 7/31
MD01A /	15	Surr	155	4	7.5	4	20.3	I	28	1	8.2	TS		CR 8/1
MD01A /	16	Surr	155	4	7.5	4	20.3	I	28	1	8.2		TS	TS 8/2
MD01A /	17	Surr	155	4	7.7	4	19.6	I	28	1	8.2			TS 8/3
MD01A /	18	Surr	155	4	7.6	4	19.8	I	28	1	8.1	BH	BH	BH 8/4
MD01A /	19	Surr	155	4	7.6	4	20.3	I	28	1	8.2			MP 8/5
MD01A /	20	Surr	155	4	7.6	4	20.2	I	28	1	8.2			BH 8/6

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	°C	meter	ppt	meter	unit			
MD02A /	0	Surr	124	4	7.3	4	20.2	R	28	S	7.9		CR	CR 7/17
MD02A /	1	Surr	124	4	7.5	4	20.3	R	30	S	7.9			MMB 7/18
MD02A /	2	Surr	124	4	7.5	4	20.4	R	29	S	8.0		CR	CR 7/19
MD02A /	3	Surr	124	4	7.5	4	20.2	R	28	S	8.2	CR		CR 7/20
MD02A /	4	Surr	124	4	7.7	4	18.9	R	29	S	8.0		J	J 7/21
MD02A /	5	Surr	124	4	7.4	4	20.3	R	29	S	8.2			TS 7/22
MD02A /	6	Surr	124	4	7.7	4	20.1	R	28	S	8.2	MMB	TS	J 7/23
MD02A /	7	Surr	124	4	7.7	4	19.8	R	28	S	8.3			CR 7/24
MD02A /	8	Surr	124	4	7.5	4	20.3	1	29	1	8.3		BH	BH 7/25
MD02A /	9	Surr	124	4	7.5	4	20.3	1	29	1	8.3			BH 7/26
MD02A /	10	Surr	124	4	7.6	4	19.7	1	28	1	8.4		BH	BH 7/27
MD02A /	11	Surr	124	4	7.4	4	20.4	1	28	1	8.3			CR 7/28
MD02A /	12	Surr	124	4	7.6	4	20.3	1	27	1	8.3	TS	TS	TS 7/29
MD02A /	13	Surr	124	4	7.4	4	20.3	1	28	1	8.3			CR 7/30
MD02A /	14	Surr	124	4	7.4	4	20.3	1	28	1	8.2		CR	CR 7/31
MD02A /	15	Surr	124	4	7.4	4	20.4	1	28	1	8.3	TS		CR 8/1
MD02A /	16	Surr	124	4	7.4	4	20.5	1	28	1	8.2		TS	TS 8/2
MD02A /	17	Surr	124	4	7.6	4	19.6	1	28	1	8.1			TS 8/3
MD02A /	18	Surr	124	4	7.6	4	20.0	1	28	1	8.1	BH	BH	BH 8/4
MD02A /	19	Surr	124	4	7.6	4	20.3	1	28	1	8.1			MP 8/5
MD02A /	20	Surr	124	4	7.6	4	20.2	1	28	1	8.1			BH 8/6



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				>6.0	D.O.	meter	mg/L	20 ± 1	TEMP	meter	ppt			
MD03A /	0	Surr	26	4	7.7	4	20.1	R	28	S	7.9		CR	CR 7/17
MD03A /	1	Surr	26	4	7.1	4	20.1	R	29	S	7.9			MMB 7/18
MD03A /	2	Surr	26	4	7.5	4	20.4	R	29	S	8.2		CR	CR 7/19
MD03A /	3	Surr	26	4	7.6	4	20.2	R	28	S	8.2	CR		CR 7/20
MD03A /	4	Surr	26	4	7.7	4	19.8	R	28	S	8.3		A	A 7/21
MD03A /	5	Surr	26	4	7.6	4	20.2	R	28	S	8.3			B 7/22
MD03A /	6	Surr	26	4	7.6	4	20.0	R	28	S	8.4	MMB	TS	A 7/23
MD03A /	7	Surr	26	4	7.9	4	19.6	R	27	S	8.4			CR 7/24
MD03A /	8	Surr	26	4	7.6	4	20.2	I	28	I	8.4		BH	BH 7/25
MD03A /	9	Surr	26	4	7.8	4	20.3	I	28	I	8.5	BH		BH 7/26
MD03A /	10	Surr	26	4	7.7	4	20.0	I	28	I	8.3		BH	BH 7/27
MD03A /	11	Surr	26	4	7.5	4	20.3	I	27	I	8.2			CR 7/28
MD03A /	12	Surr	26	4	7.6	4	20.3	I	28	I	8.1	TS	TS	TS 7/29
MD03A /	13	Surr	26	4	7.6	4	20.2	I	28	I	8.1			CR 7/30
MD03A /	14	Surr	26	4	7.6	4	20.0	I	28	I	8.1		CR	CR 7/31
MD03A /	15	Surr	26	4	7.5	4	20.2	I	28	I	8.1	TS		CR 8/1
MD03A /	16	Surr	26	4	7.5	4	20.3	I	28	I	8.1		TS	TS 8/2
MD03A /	17	Surr	26	4	7.7	4	19.5	I	28	I	8.0			TS 8/3
MD03A /	18	Surr	26	4	7.7	4	20.1	I	28	I	8.1	BH	BH	BH 8/4
MD03A /	19	Surr	26	4	7.7	4	20.3	I	28	I	8.1			MP 8/5
MD03A /	20	Surr	26	4	7.7	4	20.3	I	28	I	8.1			BH 8/6



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME 1430 /	DILUTION WATER BATCH 0	PROTOCOL PSEP 1995	TEST START DATE 27-Jun-2008
JOB NUMBER 0	PROJECT MANAGER 0	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 17-Jul-2008

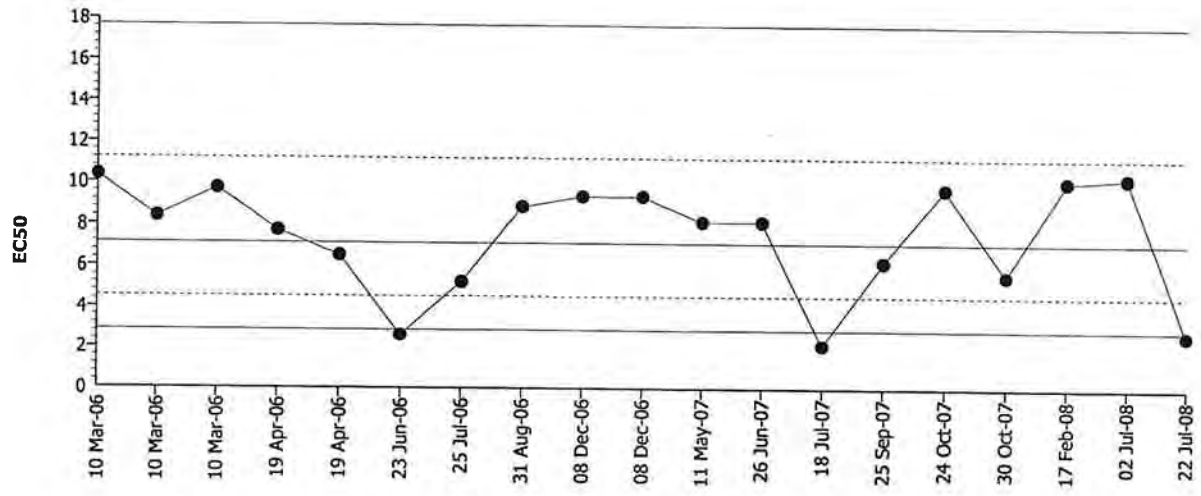
TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
WW01A /	0	Surr	13	4	7.8	4	20.1	R	28	5	7.9		CR	CR 7/17
WW01A /	1	Surr	13	4	7.8	4	20.0	R	28	5	8.0			MMB 7/18
WW01A /	2	Surr	13	4	8.1	4	20.3	R	28	5	8.1		CR	CR 7/19
WW01A /	3	Surr	13	4	7.7	4	20.2	R	28	5	8.3	CR		CR 7/20
WW01A /	4	Surr	13	4	7.7	4	18.9	R	28	5	8.1		A	A 7/21
WW01A /	5	Surr	13	4	7.6	4	20.2	R	28	5	8.3			TS 7/22
WW01A /	6	Surr	13	4	7.8	4	20.0	R	28	5	8.3	MMB	TS	A 7/23
WW01A /	7	Surr	13	4	7.9	4	20.0	R	27	5	8.2			CR 7/24
WW01A /	8	Surr	13	4	7.9	4	19.3	1	28	1	8.2		BH	BH 7/25
WW01A /	9	Surr	13	4	7.8	4	20.3	1	29	1	8.4			BH 7/26
WW01A /	10	Surr	13	4	7.7	4	19.6	1	28	1	8.3		BH	BH 7/27
WW01A /	11	Surr	13	4	7.6	4	20.3	1	28	1	8.2			CR 7/28
WW01A /	12	Surr	13	4	7.7	4	20.2	1	28	1	8.2	TS	TS	TS 7/29
WW01A /	13	Surr	13	4	7.7	4	20.2	1	28	1	8.2			CR 7/30
WW01A /	14	Surr	13	4	7.6	4	20.1	1	28	1	8.1		CR	CR 7/31
WW01A /	15	Surr	13	4	7.6	4	20.2	1	28	1	8.3	TS		CR 8/1
WW01A /	16	Surr	13	4	7.6	4	20.1	1	28	1	8.2		TS	TS 8/2
WW01A /	17	Surr	13	4	7.7	4	19.6	1	28	1	8.1			TS 8/3
WW01A /	18	Surr	13	4	7.7	4	20.1	1	28	1	8.2	BH	BH	BH 8/4
WW01A /	19	Surr	13	4	7.5	4	20.2	1	28	1	8.0			MP 8/5
WW01A /	20	Surr	13	4	7.6	4	20.3	1	28	1	8.0			BH 8/6

① WCCR 7/19

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: 7.12805 Count: 18 -1s Warning Limit: 4.52667 -2s Action Limit: 2.87466
 Sigma: CV: 57.47% +1s Warning Limit: 11.2244 +2s Action Limit: 17.6748

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Mar	10	10.35175	3.22370	0.82175			14-2451-5687	14-3844-2284
2			10	8.38556	1.25751	0.35783			07-0179-9882	09-0608-4239
3			10	9.73577	2.60772	0.68664			12-2949-2561	10-8322-9812
4		Apr	19	7.70725	0.57920	0.17206			11-0689-5535	16-2728-6447
5			19	6.52448	-0.60357	-0.19486			06-6982-0696	07-7843-7824
6		Jun	23	2.61220	-4.51586	-2.21086	(-)	(-)	11-2423-7791	08-2080-8513
7		Jul	25	5.22653	-1.90152	-0.68338			15-7582-9934	07-9049-7308
8		Aug	31	8.86577	1.73772	0.48047			16-7169-3504	00-9849-6979
9		Dec	8	9.37175	2.24370	0.60271			10-5822-0812	10-0140-9364
10			8	9.37175	2.24370	0.60271			10-5822-0812	08-7192-3895
11	2007	May	11	8.16253	1.03447	0.29846			03-7778-9913	06-1785-2165
12		Jun	26	8.16258	1.03453	0.29847			09-6212-3109	14-8493-4946
13		Jul	18	2.13748	-4.99058	-2.65259	(-)	(-)	09-5163-0637	11-9760-1230
14		Sep	25	6.20193	-0.92612	-0.30652			06-6354-6111	12-2113-4941
15		Oct	24	9.76006	2.63201	0.69213			05-9113-1606	14-0319-5260
16			30	5.55412	-1.57394	-0.54949			03-0327-1386	13-6201-5780
17	2008	Feb	17	10.12762	2.99957	0.77354			11-6935-8907	04-7495-8038
18		Jul	2	10.30107	3.17302	0.81094			07-0160-7176	03-3190-0644
19			22	2.65108	-4.47697	-2.17832	(-)	(-)	12-3989-8103	10-4556-3131

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	12-3989-8103	12-3989-8103	17 Sep-08 1:25 PM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		1.875	3.75	53.3333	2.65165	30.70%

Group Comparisons

Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		1.875	1.07908	2.33687	0.2543	0.33149	Non-Significant Effect
		3.75	6.21524	2.33687	0.0007	0.33149	Significant Effect

ANOVA Table

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	1.33152	0.6657602	2	22.06	0.00172	Significant Effect
Error	0.181094	0.0301823	6			
Total	1.51261435	0.6959425	8			

ANOVA Assumptions

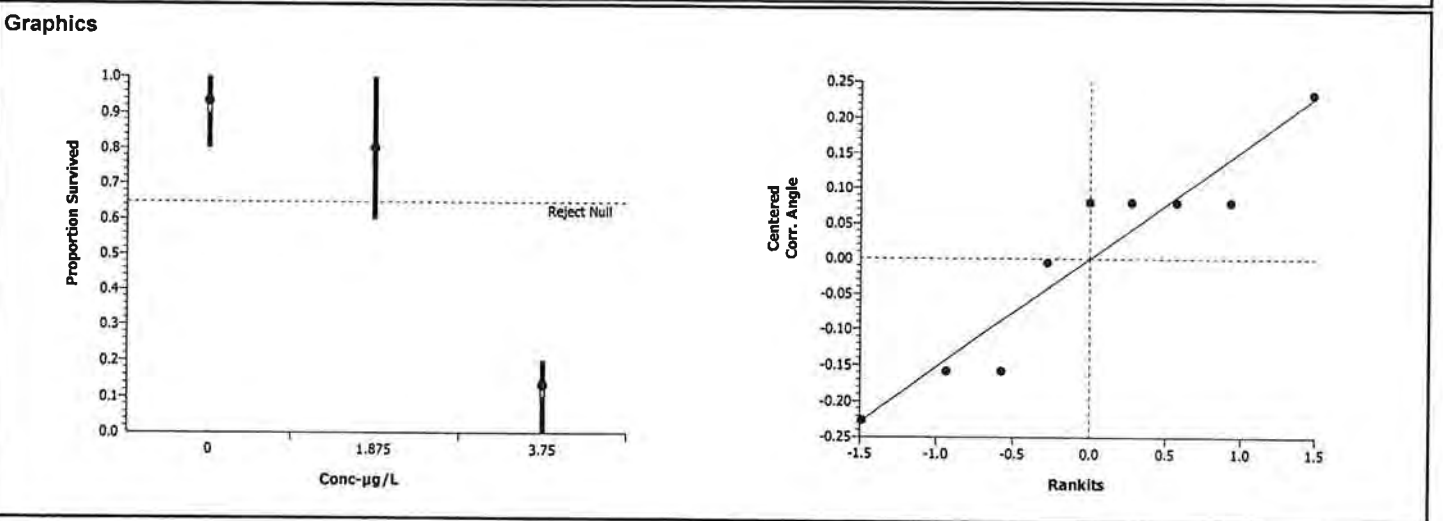
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	0.61815	9.21034	0.73412	Equal Variances
Distribution	Shapiro-Wilk W	0.89602		0.22983	Normal Distribution

Data Summary

Conc-µg/L	Control Type	Count	Original Data				Transformed Data			
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.93333	0.80000	1.00000	0.11547	1.26590	1.10715	1.34528	0.13749
1.875		3	0.80000	0.60000	1.00000	0.20000	1.11284	0.88608	1.34528	0.22966
3.75		3	0.13333	0.00000	0.20000	0.11547	0.38427	0.22551	0.46365	0.13749

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	0.80000							
		0.80000	0.60000	1.00000							
		0.20000	0.20000	0.00000							



CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Regression	12-3989-8103	12-3989-8103	17 Sep-08 1:25 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	0.0666667	Yes	Yes	No	No

Regression Summary

Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)
6	-12.95534	0.27525	0.13973	0.35569	3.69449	22.36203	0.99403	Non-Significant Heterogeneity

Point Estimates

% Effect	Conc-µg/L	95% LCL	95% UCL
10	1.75528	0.753005	2.289772
15	1.899319	0.9060568	2.43083
20	2.02218	1.047227	2.554869
25	2.133899	1.183169	2.672121
40	2.443555	1.587108	3.033658
50	2.651083	1.86559	3.323887

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)
Threshold	0.06705514	0.06445813	-0.0592828	0.1933931	1.040	0.31717	Not Significant
Slope	7.156429	2.177592	2.88835	11.42451	3.286	0.00590	Significant
Intercept	1.9698	0.9952742	0.01906281	3.920538	1.979	0.06938	Not Significant

Residual Analysis

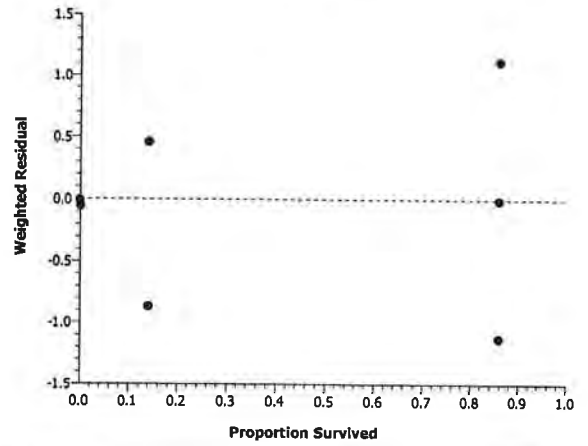
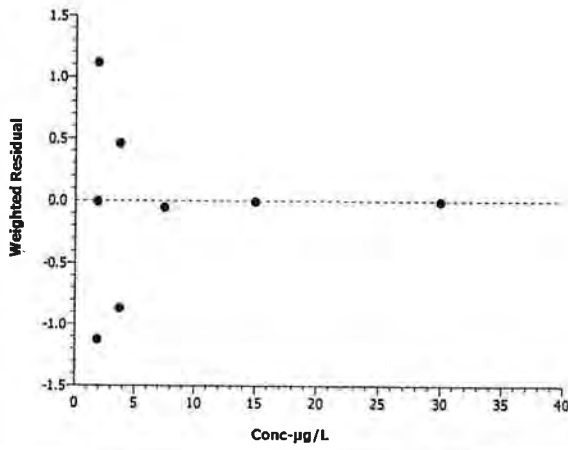
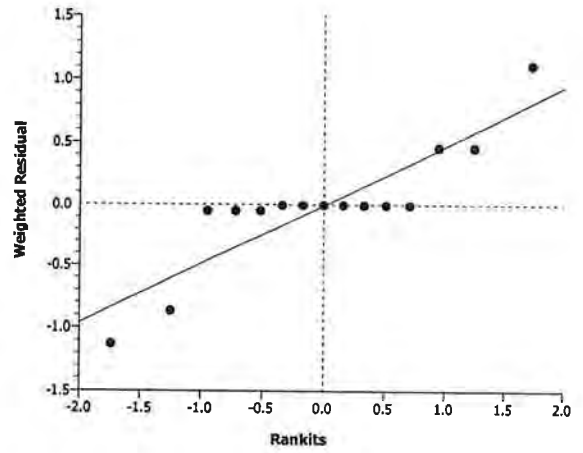
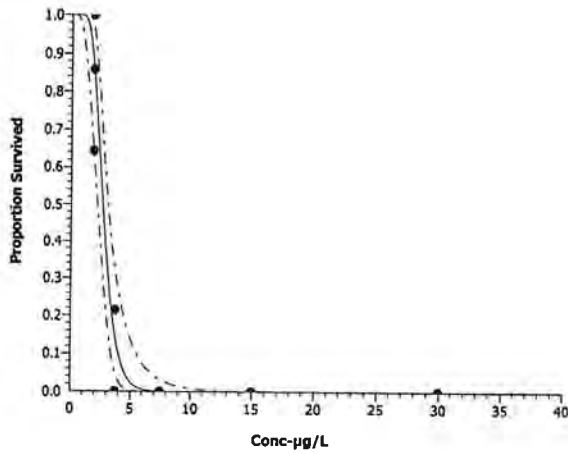
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)
Variances	Modified Levene	7.245672	3.47805	0.00524	Unequal Variances
Distribution	Shapiro-Wilk W	0.8157067		0.00589	Non-normal Distribution

Data Summary

Conc-µg/L	Control Type	Count	Calculated Variate(A/B)						
			Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.93333	0.80000	1.00000	0.02357	0.11547	14	15
1.875		3	0.80000	0.60000	1.00000	0.04082	0.20000	12	15
3.75		3	0.13333	0.00000	0.20000	0.02357	0.11547	2	15
7.5		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	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

Graphics





96-HOUR REFERENCE TOXICANT TEST WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Neanthes arenaceodentata	NEWFIELDS LABORATORY Port Gamble Room 1	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER 0	QUANTITY OF STOCK : 4.5 mL	QUANTITY OF DILUENT: 1500mL	INIT CR
Test ID P080418.09	LOT #: 065107C	ACTUAL: 4.508	ACTUAL: 1500.0	DATE PREP 7/22/08
		TEST START DATE: 22Jul08	TIME 1445	TIME 1330
			TEST END DATE 26Jul08	

WATER QUALITY DATA

DILTN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL										REFERENCE TOXICANT	
		cadmium chloride										cadmium	
CLIENT/ NEWFIELDS ID	CONCENTRATION value	units	DAY	REP	D.O.		TEMP.		SALINITY		pH		TECHNICIAN
					meter	mg/L	meter	°C	meter	ppt	meter	unit	
Ref.Tox.-cadmium	0	mg/L	0	Stock	4	7.7	4	19.3	R	28	5	7.2	MMB
			4	Rep	4	7.6	4	19.5	1	29	1	8.0	BH
Ref.Tox.-cadmium	1.875	mg/L	0	Stock	4	7.9	4	19.6	R	28	5	7.5	MMB
			4	Rep	4	7.1	4	19.5	1	29	1	7.9	BH
Ref.Tox.-cadmium	3.75	mg/L	0	Stock	4	7.9	4	19.6	R	28	5	7.5	MMB
			4	Rep	4	6.9	4	19.3	1	29	1	7.9	BH
Ref.Tox.-cadmium	7.5	mg/L	0	Stock	4	7.9	4	19.6	R	28	5	7.6	MMB
			4	Rep									
Ref.Tox.-cadmium	15	mg/L	0	Stock	4	7.9	4	19.7	R	28	5	7.7	MMB
			4	Rep									
Ref.Tox.-cadmium	30	mg/L	0	Stock	4	8.0	4	19.8	R	28	5	7.7	MMB
			4	Rep									

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES													
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 3		PSEP 1995		Mearnsites arenaceodignata													
CLIENT/NEWFIELDS ID	REP	JAR	Date and Initials		ENDPOINT DATA & OBSERVATIONS										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					
Control /	1	37	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	115.93	188.10
	2	70	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	186.82	291.16
	3	118	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	190.78	283.78
	4	14	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	173.77	234.40
	5	28	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	165.33	234.40
RF01A /	1	76	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	166.61	236.90
	2	135	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	186.49	258.29
	3	150	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	168.39	261.66
	4	71	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	152.37	227.53
	5	74	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	162.75	241.91
RF02A /	1	2	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	175.35	280.37
	2	41	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	190.00	251.19
	3	42	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	170.66	237.56
	4	98	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	169.05	235.40
	5	86	N	8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 MMB	8/16 CR	8/17 TS	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 TS	172.92	235.37

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES																
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 3		PSEP 1995		Neanthes arenaceodentata																
CLIENT MEMBRID ID	REP	JAN	ENDPOINT DATA & OBSERVATIONS													TARE WEIGHT (mg)	TOTAL WEIGHT (mg)											
			INITIALS	1	2	3	4	5	6	7	8	9	10	11	12			13	14	15	16	17	18	19	20			
RF03A /	1	129	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	173.35	224.84	16	
	2	67		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	176.77	283.24	17
	3	146		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	197.72	269.63	18
	4	101		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	196.61	277.35	19
	5	69		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	178.82	214.70	20
EI02A /	1	75	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	186.92	280.47	21
	2	22		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	188.23	287.88	22
	3	147		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	181.44	270.33	23
	4	34		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	175.65	254.56	24
	5	138		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	182.54	266.91	25
IE07A /	1	117	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	179.60	256.47	26
	2	144		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	187.36	263.81	27
	3	149		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	186.30	258.46	28
	4	18		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	183.23	285.44	29
	5	39		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	184.78	257.00	30

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES										
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 3					PSEP 1995		Neanthes arenaceodentata										
CLIENT NEWFIELD ID	REP.	JAR	ENDPOINT DATA & OBSERVATIONS												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	
RLO1A /	1	93	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	178.80	282.35	31
	2	73	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	173.17	272.55	32
	3	114	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	190.31	301.12	33
	4	51	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	200.72	287.36	34
	5	103	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	191.79	287.35	35
RLO2A /	1	106	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	191.05	277.49	36
	2	23	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	184.80	283.28	37
	3	19	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	189.28	286.89	38
	4	79	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	173.69	258.73	39
	5	87	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	188.16	285.61	40
CO01A /	1	27	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	189.60	274.74	41
	2	139	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	130.58	211.28	42
	3	33	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	135.24	201.34	43
	4	136	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	170.79	245.93	44
	5	46	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	167.55	237.15	45

① WC, NMB 8/18/08

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

NEWFIELDS

CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY					PROTOCOL		SPECIES												
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 3					PSEP 1995		Neanthes arenaceodentata												
CLIENT NEWFIELD ID	REP	JAN	Date and Initials		8/6 BH	8/7 MMB	8/8 MMB	8/9 BH	8/10 BH	8/11 CR	8/12 CR	8/13 MMB	8/14 TS	8/15 BH	8/16 MMB	8/17 MMB	8/18 TS	8/19 MMB	8/20 CR	8/21 TS	8/22 TS	8/23 CR	8/24 CR	8/25 CR	NUMBER REMAINING	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
			INITIALS	INITIALS																							
CO04A /	1	64			N	2	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	A	5	159.03	2710.32
	2	130			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	166.98	250.55	
	3	126			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	196.80	274.76	
	4	151			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	198.56	274.72	
	5	112			N	2	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	187.22	254.68	
LA02A /	1	123			N	2	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	A	5	193.92	274.97
	2	81			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	155.49	234.82	
	3	108			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	4	158.41	223.46	
	4	5			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	176.62	254.74	
	5	32			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	4	163.78	234.06	
ECO1A Acclimated /	1	81			N	2	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	A	5	182.25	257.18
	2	142			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	A	5	201.58	240.05
	3	72			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	194.88	278.92	
	4	111			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	4	198.09	243.09	
	5	141			N	3	3	N	N	2	2	2	2	2	A	A	A	A	A	A	A	A	A	5	180.36	247.32	

01E CR 8/20

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT		PROJECT		JOB NO.		PROJECT MANAGER		NEWFIELDS LABORATORY		PROTOCOL		SPECIES															
Ecology & Environment		Port Angeles		1101-004-860		B. Hester		Port Gamble Bath 3		PSEP 1995		Neanthes arenaceodentata															
CLIENT NEWFIELD ID	REP	JAR	ENDPOINT DATA & OBSERVATIONS												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			
EC01A Unacclimated /	1	63	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4	173.72	228.18	61
	2	94	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	182.95	243.96	62
	3	107	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	180.40	244.37	63
	4	154	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	206.56	270.90	64
	5	113	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	211.96	277.52	65
EC02A /	1	104	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	195.82	278.81	66
	2	137	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	179.20	273.98	67
	3	119	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	180.09	250.84	68
	4	38	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	217.30	297.59	69
	5	36	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	205.22	269.80	70



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Port Angeles	Organism: Nearthes <i>uvBetch</i>	NewFields Test ID:	Test Duration (days): 20
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 0
OVERLYING (OY) / 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:	
8/5/08	19.5	

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
\emptyset		8/5/08 BH	0.00	20.0	8/5/08 BH	N			0.001
RFO1A			0.00						0.006
RFO2A			<0.5						0.006
RFO3A			0.746						0.007
RLO1A			<0.5						0.010
ELO2A			<0.5						0.011
LA02A									
ECO1A Acclimated			<0.5						0.000
LA02A			<0.5						0.033
CO04A			<0.5						0.006
RLO2A			1.17						0.011
CO01A			<0.5						0.009
ECO2A			<0.5						0.009
IE07A			0.660						0.031
ECO1A Unacclimated			<0.5						0.009

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E&E/ Port Angeles	Organism: Neanthes (UV)	NewFields Test ID: 1101-004-860	Test Duration (days): 20
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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:	
8/12/08	20.5	

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	8/12/08, MMB	40.5	21.5	8/12/08 MMB	N	7.5	30	0.018
RF01A	Surr		40.5				7.4	30	0.103
RF02A	Surr		0.813				7.4	28	0.182 ②
RF03A	Surr		3.39				7.5	30	0.025
EI02A	Surr		0.880				7.4	30	0.214
IE07A	Surr		2.08				7.2	29	0.287
RL01A	Surr		1.18				7.1	30	0.157
RL02A	Surr		3.27				7.3	30	0.152
CO01A	Surr		40.5				7.5	30	0.129
CO04A	Surr		40.5				7.4	30	0.045
LA02A	Surr		1.12				7.4	30	0.052
EC01A Acclimated	Surr		40.5				7.3 7.4	28 30	0.035
EC01A Unacclimated	Surr		40.5				6.7	29	0.166
EC02A	Surr		40.5				7.3	30	0.086

① wc, MMB 8/12/08

② Used 12.5 ml sample due to low collection (PW) amount;
MMB 8/12/08



Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: <i>E+E/Port Angeles</i>	Organism: <i>Neanthes UV Batch</i>	NewFields Test ID:	Test Duration (days):
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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:	
<i>8/25/08</i>	<i>21.0</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>Surv.</i>	<i>8/25/08CR</i>	<i><0.5</i>	<i>20.5</i>	<i>8/25/08CR</i>	<i>N</i>			<i>0.000</i>
<i>RFAA</i>			<i><0.5</i>						<i>0.000</i>
<i>RFO2A</i>			<i><0.5</i>						<i>0.010</i>
<i>RFO3A</i>			<i><0.5</i>						<i>0.008</i>
<i>E102A</i>			<i><0.5</i>						<i>0.003</i>
<i>IE07A</i>			<i><0.5</i>						<i>0.001</i>
<i>RLO1A</i>			<i><0.5</i>						<i>0.000</i>
<i>RLO2A</i>			<i><0.5</i>						<i>0.011</i>
<i>COO1A</i>			<i><0.5</i>						<i>0.000</i>
<i>COO4A</i>			<i><0.5</i>						<i>0.000</i>
<i>LA02A</i>			<i><0.5</i>						<i>0.020</i>
<i>ECO1Acc.</i>			<i><0.5</i>						<i>0.000</i>
<i>ECO1Unacc.</i>			<i><0.5</i>						<i>0.000</i>
<i>ECO2</i>			<i><0.5</i>						<i>0.009</i>



Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: <i>E+E/Port Angeles</i>	Organism: <i>Neaethes UVBatch</i>	NewFields Test ID:	Test Duration (days):
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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:	
<i>8/25/08</i>	<i>21.0</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>Control</i>	<i>Surr.</i>	<i>8/25/08 CR</i>	<i>0.696</i>	<i>21.5</i>	<i>8/25/08 CR</i>	<i>N</i>	<i>7.6</i>	<i>29</i>	<i>0.013</i>
<i>RFO1A</i>			<i><0.5</i>				<i>7.4</i>	<i>28</i>	<i>0.047</i>
<i>RFO2A</i>			<i><0.5</i>				<i>7.3</i>	<i>29</i>	<i>0.064</i>
<i>RFO3A</i>			<i><0.5</i>				<i>6.9</i>	<i>29</i>	<i>0.095</i>
<i>E102 A</i>			<i><0.5</i>				<i>7.1</i>	<i>29</i>	<i>0.160</i>
<i>IE07A</i>			<i><0.5</i>				<i>6.6</i>	<i>29</i>	<i>0.116</i>
<i>RL01A</i>			<i><0.5</i>				<i>6.8</i>	<i>28</i>	<i>0.079</i>
<i>RL02A</i>			<i>0.566</i>				<i>6.8</i>	<i>28</i>	<i>0.139</i>
<i>CO01A</i>			<i><0.5</i>				<i>7.3</i>	<i>29</i>	<i>0.080</i>
<i>CO04A</i>			<i><0.5</i>				<i>7.3</i>	<i>28</i>	<i>0.029</i>
<i>LA02A</i>			<i><0.5</i>				<i>7.0</i>	<i>28</i>	<i>0.168</i>
<i>ECO1A Acc.</i>			<i><0.5</i>				<i>6.9</i>	<i>29</i>	<i>0.200</i>
<i>ECO1A Unacc.</i>			<i><0.5</i>				<i>6.9</i>	<i>28</i>	<i>0.131</i>
<i>ECO2A</i>	↓	↓	<i><0.5</i>		↓	↓	<i>7.1</i>	<i>28</i>	<i>0.276</i>

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Nearthes arenaceodontata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
Control /	0	Surr	17	4	7.7	4	19.6	1	28	1	7.9		TS	MP 8/5
Control /	1	Surr	17	4	7.8	4	20.3	1	28	1	8.0			BH 8/6
Control /	2	Surr	17	4	7.7	4	20.1	1	28	1	7.9		MMB	MMB 8/7
Control /	3	Surr	17	4	7.0	4	20.3	1	28	1	7.7	MMB		MMB 8/8
Control /	4	Surr	17	4	7.7	4	20.5	1	28	1	8.0		BH	BH 8/9
Control /	5	Surr	17	4	7.5	4	20.1	1	28	1	8.1			BH 8/10
Control /	6	Surr	17	4	7.5	4	20.3	1	28	1	8.1	CR	CR	CR 8/11
Control /	7	Surr	17	4	7.8	4	19.9	1	28	1	8.1			CR 8/12
Control /	8	Surr	17	4	7.8	4	19.9	1	28	1	8.0		MMB	MMB 8/13
Control /	9	Surr	17	4	7.7	4	20.1	1	28	1	8.1	TS		TS 8/14
Control /	10	Surr	17	4	7.8	4	20.3	1	29	1	8.1		BH	BH 8/15
Control /	11	Surr	17	4	7.8	4	20.3	1	29	1	8.2			MMB 8/16
Control /	12	Surr	17	4	7.8	4	20.4	1	29	1	8.1	MMB	MMB	MMB 8/17
Control /	13	Surr	17	4	6.7	4	20.2	1	27	1	7.8			TS 8/18
Control /	14	Surr	17	4	7.9	4	20.3	1	27	1	8.0		MMB	MMB 8/19
Control /	15	Surr	17	4	7.7	4	20.4	1	29	1	8.6	MMB		MMB 8/20
Control /	16	Surr	17	4	7.6	4	20.4	1	29	1	8.1		TS	TS 8/21
Control /	17	Surr	17	4	7.7	4	20.4	1	29	1	8.1			TS 8/22
Control /	18	Surr	17	4	7.6	4	20.6	1	29	1	8.1	CR	CR	CR 8/23
Control /	19	Surr	17	4	7.6	4	20.9	1	29	1	8.0			CR 8/24
Control /	20	Surr	17	4	7.5	4	20.6	1	29	1	8.0			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Nearthes arenaceoidentata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L) > 6.0		TEMP (C) 20 ± 1		SALINITY (ppt) 28 ± 1		pH 8.0±1.0		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
RF01A/	0	Surr	24	4	7.8	4	19.7	1	28	1	7.9		TS	MP 8/5
RF01A/	1	Surr	24	4	7.9	4	19.4	1	28	1	8.0			BH 8/6
RF01A/	2	Surr	24	4	7.6	4	20.2	1	28	1	8.0		MMB	MMB 8/7
RF01A/	3	Surr	24	4	7.4	4	20.2	1	28	1	7.8	MMB		MMB 8/8
RF01A/	4	Surr	24	4	7.6	4	20.5	1	28	1	8.0		BH	BH 8/9
RF01A/	5	Surr	24	4	7.7	4	20.2	1	28	1	8.0			BH 8/10
RF01A/	6	Surr	24	4	7.8	4	20.1	1	28	1	8.1	CR	CR	CR 8/11
RF01A/	7	Surr	24	4	7.9	4	19.6	1	28	1	8.1			CR 8/12
RF01A/	8	Surr	24	4	7.9	4	19.9	1	28	1	8.1		MMB	MMB 8/13
RF01A/	9	Surr	24	4	7.7	4	20.2	1	28	1	8.1			TS 8/14
RF01A/	10	Surr	24	4	7.8	4	20.3	1	29	1	8.2		BH	BH 8/15
RF01A/	11	Surr	24	4	7.8	4	20.3	1	29	1	8.2			MMB 8/16
RF01A/	12	Surr	24	4	7.8	4	20.4	1	29	1	8.1	MMB		MMB 8/17
RF01A/	13	Surr	24	4	7.6	4	20.2	1	27	1	8.1			TS 8/18
RF01A/	14	Surr	24	4	7.9	4	20.4	1	26	1	8.1		MMB	MMB 8/19
RF01A/	15	Surr	24	4	7.8	4	20.5	1	29	1	8.0	MMB		MMB 8/20
RF01A/	16	Surr	24	4	7.6	4	20.4	1	27	1	8.1		TS	TS 8/21
RF01A/	17	Surr	24	4	7.7	4	20.4	1	29	1	8.1			TS 8/22
RF01A/	18	Surr	24	4	7.6	4	20.6	1	29	1	8.1	CR	CR	CR 8/23
RF01A/	19	Surr	24	4	7.4	4	21.0	1	29	1	7.9			CR 8/24
RF01A/	20	Surr	24	4	7.5	4	20.6	1	28	1	8.0			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA				WATER RENEWAL	Feeding	TECH/DATE
	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		meter	unit				
				> 6.0	D.O.	meter	mg/L	20 ± 1	meter	28 ± 1	meter			8.0 ± 1.0			
RF02A/	0	Surr	80	4	7.8	4	19.8	1	28	1	7.9		TS	MP 8/5			
RF02A/	1	Surr	80	4	7.7	4	20.1	1	28	1	8.0			BH 8/46			
RF02A/	2	Surr	80	4	7.7	4	20.1	1	28	1	8.1		MMB	MMB 8/7			
RF02A/	3	Surr	80	4	7.6	4	20.1	1	28	1	7.9	MMB		MMB 8/8			
RF02A/	4	Surr	80	4	7.6	4	20.4	1	28	1	8.1		BH	BH 8/9			
RF02A/	5	Surr	80	4	7.8	4	20.1	1	28	1	8.1			BH 8/10			
RF02A/	6	Surr	80	4	7.8	4	20.1	1	28	1	8.1	CR		CR 8/11			
RF02A/	7	Surr	80	4	7.7	4	20.2	1	28	1	8.1			CR 8/12			
RF02A/	8	Surr	80	4	7.8	4	19.9	1	28	1	8.1		MMB	MMB 8/13			
RF02A/	9	Surr	80	4	7.7	4	20.2	1	28	1	8.1	TS		TS 8/14			
RF02A/	10	Surr	80	4	7.8	4	20.3	1	29	1	8.1		BH	BH 8/15			
RF02A/	11	Surr	80	4	7.9	4	20.2	1	29	1	8.2			MMB 8/16			
RF02A/	12	Surr	80	4	7.9	4	20.3	1	29	1	8.3	MMB		MMB 8/17			
RF02A/	13	Surr	80	4	7.7	4	20.1	1	27	1	8.2			TS 8/18			
RF02A/	14	Surr	80	4	8.0	4	20.3	1	27	1	8.1		MMB	MMB 8/19			
RF02A/	15	Surr	80	4	7.9	4	20.4	1	29	1	8.1	MMB		MMB 8/20			
RF02A/	16	Surr	80	4	7.7	4	20.4	1	29	1	8.2		TS	TS 8/21			
RF02A/	17	Surr	80	4	7.7	4	20.4	1	29	1	8.1			TS 8/22			
RF02A/	18	Surr	80	4	7.6	4	20.6	1	29	1	8.1	CR		CR 8/23			
RF02A/	19	Surr	80	4	7.5	4	20.8	1	29	1	7.9			CR 8/24			
RF02A/	20	Surr	80	4	7.6	4	20.6	1	28	1	8.0			CR 8/25			

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0 D.O.	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
RF03A/	0	Surr	84	4	7.7	4	19.8	1	28	1	7.9		TS	MP 8/5
RF03A/	1	Surr	84	4	7.7	4	20.1	1	28	1	8.0			BH 8/6
RF03A/	2	Surr	84	4	7.7	4	20.0	1	28	1	8.0		MMB	MMB 8/7
RF03A/	3	Surr	84	4	7.6	4	20.0	1	28	1	7.9	MMB		MMB 8/8
RF03A/	4	Surr	84	4	7.6	4	20.4	1	28	1	8.2		BH	BH 8/9
RF03A/	5	Surr	84	4	7.5	4	20.1	1	28	1	8.2			BH 8/10
RF03A/	6	Surr	84	4	7.7	4	20.0	1	28	1	8.3	CR	CR	CR 8/11
RF03A/	7	Surr	84	4	7.7	4	20.2	1	28	1	8.4			CR 8/12
RF03A/	8	Surr	84	4	7.8	4	19.8	1	28	1	8.3		MMB	MMB 8/13
RF03A/	9	Surr	84	4	7.7	4	20.1	1	28	1	8.3			B 8/14
RF03A/	10	Surr	84	4	7.8	4	20.2	1	29	1	8.3		BH	BH 8/15
RF03A/	11	Surr	84	4	7.8	4	20.0	1	29	1	8.3			MMB 8/16
RF03A/	12	Surr	84	4	7.9	4	20.2	1	29	1	8.3	MMB	MMB	MMB 8/17
RF03A/	13	Surr	84	4	7.7	4	20.1	1	27	1	8.2			TS 8/18
RF03A/	14	Surr	84	4	8.0	4	20.3	1	27	1	8.2		MMB	MMB 8/19
RF03A/	15	Surr	84	4	7.9	4	20.3	1	29	1	8.2	MMB		MMB 8/20
RF03A/	16	Surr	84	4	7.6	4	20.3	1	29	1	8.2		TS	T 8/21
RF03A/	17	Surr	84	4	7.7	4	20.4	1	27	1	8.2			B 8/22
RF03A/	18	Surr	84	4	7.7	4	20.5	1	29	1	8.2	CR	CR	CR 8/23
RF03A/	19	Surr	84	4	7.6	4	20.8	1	29	1	8.1			CR 8/24
RF03A/	20	Surr	84	4	7.6	4	20.6	1	29	1	8.1			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA				Feeding	TECH/DATE
	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL				
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0					
EI02A/	0	Surr	45	4	7.7	4	19.7	1	28	1	7.9		TS	MP 8/5		
EI02A/	1	Surr	45	4	7.8	4	20.1	1	28	1	8.0			BH 8/6		
EI02A/	2	Surr	45	4	7.7	4	20.2	1	28	1	8.0		MMB	MMB 8/7		
EI02A/	3	Surr	45	4	7.4	4	20.2	1	28	1	7.8	MMB		MMB 8/8		
EI02A/	4	Surr	45	4	7.6	4	20.4	1	28	1	8.0		BH	BH 8/9		
EI02A/	5	Surr	45	4	7.8	4	20.2	1	28	1	7.9			BH 8/10		
EI02A/	6	Surr	45	4	7.7	4	20.1	1	28	1	8.1	CR	CR	CR 8/11		
EI02A/	7	Surr	45	4	7.7	4	20.1	1	28	1	8.1			CR 8/12		
EI02A/	8	Surr	45	4	7.8	4	19.9	1	28	1	8.1		MMB	MMB 8/13		
EI02A/	9	Surr	45	4	7.7	4	20.2	1	28	1	8.1	TS		TS 8/14		
EI02A/	10	Surr	45	4	7.8	4	20.3	1	29	1	8.1		BH	BH 8/15		
EI02A/	11	Surr	45	4	7.8	4	20.2	1	29	1	8.1			MMB 8/16		
EI02A/	12	Surr	45	4	7.9	4	20.3	1	29	1	8.2	MMB		MMB 8/17		
EI02A/	13	Surr	45	4	7.7	4	20.2	1	27	1	8.1			TS 8/18		
EI02A/	14	Surr	45	4	8.0	4	20.3	1	27	1	8.1		MMB	MMB 8/19		
EI02A/	15	Surr	45	4	8.7	4	20.6	1	29	1	8.1	MMB		MMB 8/20		
EI02A/	16	Surr	45	4	7.6	4	20.4	1	29	1	8.2		TS	TS 8/21		
EI02A/	17	Surr	45	4	7.7	4	20.4	1	29	1	8.1			TS 8/22		
EI02A/	18	Surr	45	4	7.6	4	20.6	1	29	1	8.1	CR	CR	CR 8/23		
EI02A/	19	Surr	45	4	7.5	4	20.9	1	29	1	7.9			CR 8/24		
EI02A/	20	Surr	45	4	7.5	4	20.6	1	29	1	8.0			CR 8/25		

OWP CR 8/11

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				>6.0	D.O.	20 ± 1	TEMP	28 ± 1	SALINITY	meter	unit			
IE07A/	0	Surr	46	4	7.5	4	19.7	1	28	1	7.9		TS	MP 8/5
IE07A/	1	Surr	46	4	7.7	4	20.2	1	28	1	8.0			BH 8/6
IE07A/	2	Surr	46	4	7.5	4	20.1	1	28	1	8.0		MMB	MMB 8/7
IE07A/	3	Surr	46	4	7.5	4	20.2	1	29	1	7.9	MMB		MMB 8/8
IE07A/	4	Surr	46	4	7.5	4	20.4	1	28	1	8.2		BH	BH 8/9
IE07A/	5	Surr	46	4	7.7	4	20.1	1	28	1	8.2			BH 8/10
IE07A/	6	Surr	46	4	7.7	4	20.1	1	28	1	8.6	CR	CR	CR 8/11
IE07A/	7	Surr	46	4	7.5	4	20.3	1	28	1	8.6			CR 8/12
IE07A/	8	Surr	46	4	7.7	4	19.9	1	28	1	8.6		MMB	MMB 8/13
IE07A/	9	Surr	46	4	7.7	4	20.2	1	28	1	8.6	TS		TS 8/14
IE07A/	10	Surr	46	4	7.7	4	20.3	1	29	1	8.6		BH	BH 8/15
IE07A/	11	Surr	46	4	7.8	4	20.2	1	29	1	8.6			MMB 8/16
IE07A/	12	Surr	46	4	7.8	4	20.3	1	29	1	8.6	MMB		MMB 8/17
IE07A/	13	Surr	46	4	7.7	4	20.2	1	27	1	8.5			TS 8/18
IE07A/	14	Surr	46	4	7.9	4	20.3	1	27	1	8.5		MMB	MMB 8/19
IE07A/	15	Surr	46	4	7.9	4	20.5	1	29	1	8.5	MMB		MMB 8/20
IE07A/	16	Surr	46	4	7.6	4	20.4	1	29	1	8.5		TS	TS 8/21
IE07A/	17	Surr	46	4	7.7	4	20.4	1	29	1	8.4			TS 8/22
IE07A/	18	Surr	46	4	7.6	4	20.6	1	29	1	8.4	CR	CR	CR 8/23
IE07A/	19	Surr	46	4	7.6	4	20.9	1	29	1	8.2			CR 8/24
IE07A/	20	Surr	46	4	7.6	4	20.6	1	29	1	8.3			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER. 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0±1.0			
RL01A/	0	Surr	82	4	7.8	4	19.5	1	28	1	7.9		TS	MP 8/5
RL01A/	1	Surr	82	4	7.8	4	20.1	1	28	1	8.0			BH 8/6
RL01A/	2	Surr	82	4	7.8	4	20.0	1	28	1	8.0	MMB	MMB	MMB 8/7
RL01A/	3	Surr	82	4	7.6	4	20.1	1	28	1	7.8	MMB		MMB 8/8
RL01A/	4	Surr	82	4	7.6	4	20.4	1	28	1	8.1		BH	BH 8/9
RL01A/	5	Surr	82	4	7.7	4	20.2	1	28	1	8.2			BH 8/10
RL01A/	6	Surr	82	4	7.8	4	20.0	1	28	1	8.2	CR	CR	CR 8/11
RL01A/	7	Surr	82	4	7.9	4	19.6	1	28	1	8.2			CR 8/12
RL01A/	8	Surr	82	4	7.8	4	19.8	1	28	1	8.2	MMB	MMB	MMB 8/13
RL01A/	9	Surr	82	4	7.7	4	20.1	1	28	1	8.2			TS 8/14
RL01A/	10	Surr	82	4	7.0	4	20.2	1	29	1	8.2		BH	BH 8/15
RL01A/	11	Surr	82	4	7.9	4	20.2	1	29	1	8.3			MMB 8/16
RL01A/	12	Surr	82	4	7.9	4	20.2	1	29	1	8.3	MMB	MMB	MMB 8/17
RL01A/	13	Surr	82	4	7.7	4	20.1	1	27	1	8.2			TS 8/18
RL01A/	14	Surr	82	4	8.0	4	20.3	1	27	1	8.3	MMB	MMB	MMB 8/19
RL01A/	15	Surr	82	4	7.9	4	20.4	1	29	1	8.2	MMB		MMB 8/20
RL01A/	16	Surr	82	4	7.7	4	20.3	1	29	1	8.3		TS	TS 8/21
RL01A/	17	Surr	82	4	7.4	4	20.4	1	29	1	8.2			TS 8/22
RL01A/	18	Surr	82	4	7.7	4	20.5	1	29	1	8.2	CR	CR	CR 8/23
RL01A/	19	Surr	82	4	7.0	4	20.8	1	29	1	8.1			CR 8/24
RL01A/	20	Surr	82	4	7.6	4	20.6	1	29	1	8.1			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	D.O.	meter	°C	meter	ppt	meter	unit			
RL02A/	0	Surr	69	4	7.7	4	19.8	1	28	1	7.9		TS	MP 8/5
RL02A/	1	Surr	69	4	7.7	4	20.2	1	28	1	8.0			BH 8/6
RL02A/	2	Surr	69	4	7.7	4	20.1	1	28	1	8.0		MMB	MMB 8/7
RL02A/	3	Surr	69	4	7.5	4	20.1	1	28	1	7.8	MMB		MMB 8/8
RL02A/	4	Surr	69	4	7.6	4	20.4	1	28	1	8.1		BH	BH 8/9
RL02A/	5	Surr	69	4	7.7	4	20.1	1	28	1	8.1			BH 8/10
RL02A/	6	Surr	69	4	7.7	4	20.2	1	28	1	8.2	CR	CR	CR 8/11
RL02A/	7	Surr	69	4	7.7	4	20.3	1	28	1	8.2			CR 8/12
RL02A/	8	Surr	69	4	7.8	4	20.0	1	28	1	8.1		MMB	MMB 8/13
RL02A/	9	Surr	69	4	7.7	4	20.2	1	28	1	8.2			TS 8/14
RL02A/	10	Surr	69	4	7.6	4	20.3	1	29	1	8.2		BH	BH 8/15
RL02A/	11	Surr	69	4	7.9	4	20.2	1	29	1	8.2			MMB 8/16
RL02A/	12	Surr	69	4	7.8	4	20.2	1	29	1	8.2	MMB		MMB 8/17
RL02A/	13	Surr	69	4	7.7	4	20.1	1	27	1	8.1			TS 8/18
RL02A/	14	Surr	69	4	7.9	4	20.3	1	27	1	8.2		MMB	MMB 8/19
RL02A/	15	Surr	69	4	7.8	4	20.4	1	29	1	8.1	MMB		MMB 8/20
RL02A/	16	Surr	69	4	7.7	4	20.4	1	29	1	8.2		TS	TS 8/21
RL02A/	17	Surr	69	4	7.7	4	20.4	1	29	1	8.1			TS 8/22
RL02A/	18	Surr	69	4	7.6	4	20.6	1	29	1	8.1	CR	CR	CR 8/23
RL02A/	19	Surr	69	4	7.4	4	20.9	1	29	1	7.9			CR 8/24
RL02A/	20	Surr	69	4	7.4	4	20.6	1	29	1	8.0			CR 8/25

**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS		WATER QUALITY DATA										WATER RENEWAL	Feeding	TECH/DATE
	DAY	REP	DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH		SALINITY (ppt)		pH					
	JAR	meter	meter	meter	meter	meter	unit	meter	unit	meter	unit				
CO01A/	0	Surr	4	7.8	4	19.6	1	28	1	7.9			TS	MP 8/5	
CO01A/	1	Surr	4	7.7	4	20.3	1	28	1	8.0				BH 8/6	
CO01A/	2	Surr	4	7.7	4	20.1	1	28	1	8.0			MMB	MMB 8/7	
CO01A/	3	Surr	4	7.6	4	20.1	1	28	1	7.9		MMB		MMB 8/8	
CO01A/	4	Surr	4	7.6	4	20.3	1	28	1	8.0			BH	BH 8/9	
CO01A/	5	Surr	4	7.7	4	19.9	1	28	1	8.0				BH 8/10	
CO01A/	6	Surr	4	7.7	4	20.0	1	28	1	8.1		CR	CR	CR 8/11	
CO01A/	7	Surr	4	7.8	4	19.9	1	28	1	8.1				CR 8/12	
CO01A/	8	Surr	4	7.8	4	19.8	1	28	1	8.1			MMB	MMB 8/13	
CO01A/	9	Surr	4	7.7	4	20.0	1	28	1	8.1		TS		TS 8/14	
CO01A/	10	Surr	4	7.6	4	20.3	1	29	1	8.1			BH	BH 8/15	
CO01A/	11	Surr	4	7.8	4	20.2	1	29	1	8.1				MMB 8/16	
CO01A/	12	Surr	4	7.8	4	20.3	1	29	1	8.2		MMB		MMB 8/17	
CO01A/	13	Surr	4	7.6	4	20.1	1	27	1	8.1				TS 8/18	
CO01A/	14	Surr	4	7.9	4	20.1	1	27	1	8.1			MMB	MMB 8/19	
CO01A/	15	Surr	4	7.8	4	20.4	1	29	1	8.1		MMB		MMB 8/20	
CO01A/	16	Surr	4	7.6	4	20.4	1	29	1	8.1			TS	TS 8/21	
CO01A/	17	Surr	4	7.6	4	20.4	1	29	1	8.1				TS 8/22	
CO01A/	18	Surr	4	7.6	4	20.6	1	29	1	8.1		CR	CR	CR 8/23	
CO01A/	19	Surr	4	7.5	4	21.0	1	29	1	7.9				CR 8/24	
CO01A/	20	Surr	4	7.5	4	20.5	1	29	1	7.9				CR 8/25	

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

CLIENT/NEWFIELDS ID	DAY	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
			>6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
			meter	D.O.	meter	°C	meter	ppt	meter	unit			
CO04A/	0	Surr	4	7.8	4	19.6	1	28	1	7.9		TS	MP 8/5
CO04A/	1	Surr	4	7.8	4	20.1	1	28	1	8.0			BH 8/6
CO04A/	2	Surr	4	7.7	4	20.1	1	28	1	8.0		MMB	MMB 8/7
CO04A/	3	Surr	4	7.1	4	20.2	1	28	1	7.7	MMB		MMB 8/8
CO04A/	4	Surr	4	7.6	4	20.4	1	28	1	8.1		BH	BH 8/9
CO04A/	5	Surr	4	7.7	4	20.4	1	28	1	8.3			BH 8/10
CO04A/	6	Surr	4	7.7	4	20.1	1	28	1	8.1	CR	CR	CR 8/11
CO04A/	7	Surr	4	8.3	4	19.7	1	28	1	8.1			CR 8/12
CO04A/	8	Surr	4	7.8	4	20.0	1	28	1	8.1		MMB	MMB 8/13
CO04A/	9	Surr	4	7.7	4	20.2	1	28	1	8.2	TS		TS 8/14
CO04A/	10	Surr	4	8.9	4	20.3	1	29	1	8.3		BH	BH 8/15
CO04A/	11	Surr	4	8.0	4	20.3	1	29	1	8.3			MMB 8/16
CO04A/	12	Surr	4	7.9	4	20.3	1	29	1	8.2	MMB	MMB	MMB 8/17
CO04A/	13	Surr	4	7.7	4	20.2	1	27	1	8.2			TS 8/18
CO04A/	14	Surr	4	8.0	4	20.4	1	27	1	8.2		MMB	MMB 8/19
CO04A/	15	Surr	4	7.8	4	20.5	1	29	1	8.2	MMB		MMB 8/20
CO04A/	16	Surr	4	7.7	4	20.4	1	29	1	8.3		TS	TS 8/21
CO04A/	17	Surr	4	7.7	4	20.5	1	29	1	8.3			TS 8/22
CO04A/	18	Surr	4	7.6	4	20.6	1	29	1	8.2	CR	CR	CR 8/23
CO04A/	19	Surr	4	7.5	4	20.21.0	1	29	1	8.0			CR 8/24
CO04A/	20	Surr	4	7.3	4	20.6	1	28	1	8.0			CR 8/25

① IE CR 8/24

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0	meter	20 ± 1	meter	28 ± 1	meter	8.0 ± 1.0			
LA02A/	0	Surr	3	4	7.7	4	19.2	1	28	1	7.7		TS	MP 8/5
LA02A/	1	Surr	3	4	7.7	4	19.5	1	28	1	8.0			BH 8/6
LA02A/	2	Surr	3	4	7.7	4	19.4	1	28	1	7.8		MMB	MMB 8/7
LA02A/	3	Surr	3	4	7.6	4	19.9	1	28	1	7.9	MMB		MMB 8/8
LA02A/	4	Surr	3	4	7.6	4	20.1	1	28	1	8.0		BH	BH 8/9
LA02A/	5	Surr	3	4	7.8	4	20.0	1	28	1	8.0			BH 8/10
LA02A/	6	Surr	3	4	7.5	4	19.7	1	28	1	8.4	CR	CR	CR 8/11
LA02A/	7	Surr	3	4	7.7	4	19.9	1	28	1	8.3			CR 8/12
LA02A/	8	Surr	3	4	7.7	4	19.7	1	28	1	8.3	MMB	MMB	MMB 8/13
LA02A/	9	Surr	3	4	7.6	4	19.8	1	28	1	8.3			TS 8/14
LA02A/	10	Surr	3	4	7.7	4	20.1	1	29	1	8.3		BH	BH 8/15
LA02A/	11	Surr	3	4	7.7	4	20.1	1	29	1	8.3			MMB 8/16
LA02A/	12	Surr	3	4	7.7	4	20.2	1	29	1	8.3	MMB	MMB	MMB 8/17
LA02A/	13	Surr	3	4	7.6	4	19.9	1	27	1	8.1			TS 8/18
LA02A/	14	Surr	3	4	8.0	4	19.9	1	27	1	8.2		MMB	MMB 8/19
LA02A/	15	Surr	3	4	7.7	4	20.4	1	29	1	8.0	MMB		MMB 8/20
LA02A/	16	Surr	3	4	7.5	4	20.3	1	29	1	8.0		TS	TS 8/21
LA02A/	17	Surr	3	4	7.6	4	20.4	1	29	1	8.0			TS 8/22
LA02A/	18	Surr	3	4	7.5	4	20.6	1	29	1	8.0	CR	CR	CR 8/23
LA02A/	19	Surr	3	4	7.4	4	21.0	1	29	1	7.9			CR 8/24
LA02A/	20	Surr	3	4	7.3	4	20.4	1	29	1	7.9			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

TEST CONDITIONS		WATER QUALITY DATA												
CLIENT/NEWFIELDS ID	DAY	REP	JAR	DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
				meter	>6.0 D.O.	meter	20 ± 1	meter	28 ± 1	meter	unit			
EC01A Acclimated /	0	Surr	83	4	7.8	4	19.8	1	27	1	7.7		TS	MP 8/5
EC01A Acclimated /	1	Surr	83	4	7.7	4	20.1	1	27	1	7.9			BH 8/6
EC01A Acclimated /	2	Surr	83	4	7.8	4	19.9	1	27	1	7.8		MMS	MMS 8/7
EC01A Acclimated /	3	Surr	83	4	7.5	4	20.0	1	27	1	7.6	MMS		MMS 8/8
EC01A Acclimated /	4	Surr	83	4	7.6	4	20.4	1	27	1	7.9		BH	BH 8/9
EC01A Acclimated /	5	Surr	83	4	7.7	4	20.2	1	27	1	8.0			BH 8/10
EC01A Acclimated /	6	Surr	83	4	7.8	4	20.0	1	27	1	7.9	CR	CR	CR 8/11
EC01A Acclimated /	7	Surr	83	4	7.8	4	20.1	1	28	1	8.0			CR 8/12
EC01A Acclimated /	8	Surr	83	4	7.8	4	19.8	1	28	1	7.9		MMS	MMS 8/13
EC01A Acclimated /	9	Surr	83	4	7.8	4	20.1	1	28	1	8.0	TS		TS 8/14
EC01A Acclimated /	10	Surr	83	4	7.8	4	20.2	1	29	1	8.1		BH	BH 8/15
EC01A Acclimated /	11	Surr	83	4	7.9	4	20.2	1	29	1	8.1			MMS 8/16
EC01A Acclimated /	12	Surr	83	4	7.9	4	20.2	1	29	1	8.1	MMS		MMS 8/17
EC01A Acclimated /	13	Surr	83	4	7.7	4	20.1	1	27	1	8.3			TS 8/18
EC01A Acclimated /	14	Surr	83	4	8.0	4	20.3	1	27	1	8.1		MMS	MMS 8/19
EC01A Acclimated /	15	Surr	83	4	7.9	4	20.3	1	29	1	8.0	MMS		MMS 8/20
EC01A Acclimated /	16	Surr	83	4	7.7	4	20.3	1	29	1	8.2		TS	TS 8/21
EC01A Acclimated /	17	Surr	83	4	7.7	4	20.4	1	29	1	8.1			TS 8/22
EC01A Acclimated /	18	Surr	83	4	7.7	4	20.5	1	29	1	8.1	CR	CR	CR 8/23
EC01A Acclimated /	19	Surr	83	4	7.6	4	20.8	1	29	1	8.0			CR 8/24
EC01A Acclimated /	20	Surr	83	4	7.6	4	20.6	1	28	1	8.1			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Aug-2008

CLIENT/NEWFIELDS ID	DAY	REP	JAR	TEST CONDITIONS				WATER QUALITY DATA				WATER RENEWAL	Feeding	TECH/DATE
				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH	meter	meter	meter	unit			
EC01A Unacclimated /	0	Surr	64	4	7.8	4	19.5	1	28	1	7.7		TS	MP 8/5
EC01A Unacclimated /	1	Surr	64	4	7.7	4	20.2	1	27	1	7.9			BH 8/6
EC01A Unacclimated /	2	Surr	64	4	7.6	4	20.1	1	27	1	7.8		MMB	MMB 8/7
EC01A Unacclimated /	3	Surr	64	4	7.4	4	20.1	1	27	1	7.6	MMB		MMB 8/8
EC01A Unacclimated /	4	Surr	64	4	7.6	4	20.4	1	27	1	7.9		BH	BH 8/9
EC01A Unacclimated /	5	Surr	64	4	7.8	4	20.2	1	27	1	8.0			BH 8/10
EC01A Unacclimated /	6	Surr	64	4	7.7	4	20.2	1	28	1	7.9	CR	CR	CR 8/11
EC01A Unacclimated /	7	Surr	64	4	7.7	4	20.3	1	28	1	8.0			CR 8/12
EC01A Unacclimated /	8	Surr	64	4	7.8	4	19.9	1	28	1	8.0		MMB	MMB 8/13
EC01A Unacclimated /	9	Surr	64	4	7.8	4	20.2	1	28	1	8.1	B		TS 8/14
EC01A Unacclimated /	10	Surr	64	4	7.9	4	20.3	1	29	1	8.1		BH	BH 8/15
EC01A Unacclimated /	11	Surr	64	4	7.9	4	20.2	1	29	1	8.1			MMB 8/16
EC01A Unacclimated /	12	Surr	64	4	7.9	4	20.3	1	29	1	8.1	MMB	MMB	MMB 8/17
EC01A Unacclimated /	13	Surr	64	4	7.7	4	20.0	1	27	1	8.2			T 8/18
EC01A Unacclimated /	14	Surr	64	4	8.6	4	20.3	1	27	1	8.1		MMB	MMB 8/19
EC01A Unacclimated /	15	Surr	64	4	7.9	4	20.5	1	29	1	8.0	MMB		MMB 8/20
EC01A Unacclimated /	16	Surr	64	4	7.7	4	20.4	1	29	1	8.2		T	T 8/21
EC01A Unacclimated /	17	Surr	64	4	7.7	4	20.5	1	29	1	8.2			T 8/22
EC01A Unacclimated /	18	Surr	64	4	7.7	4	20.6	1	29	1	8.1	CR	CR	CR 8/23
EC01A Unacclimated /	19	Surr	64	4	7.7	4	20.9	1	29	1	8.1			CR 8/24
EC01A Unacclimated /	20	Surr	64	4	7.6	4	20.6	1	28	1	8.1			CR 8/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET



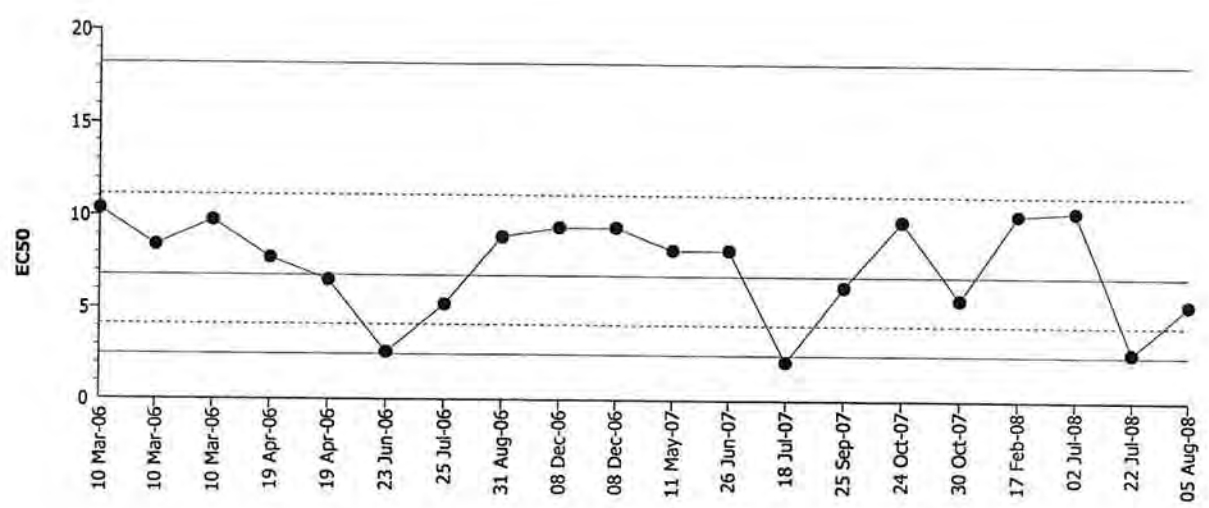
CLIENT Ecology & Environment	PROJECT Port Angeles	START TIME/ END TIME /	DILUTION WATER BATCH FSW080408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Aug-2008
JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble	TEMP. RECDR./HOB0#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Aug-2008

CLIENT/NEWFIELDS ID	TEST CONDITIONS										WATER QUALITY DATA				Feeding	WATER RENEWAL	TECH/DATE
	DAY	REP	JAR	DO (mg/L) > 6.0	TEMP (C) 20 ± 1	SALINITY (ppt) 28 ± 1	pH 8.0 ± 1.0		meter	unit	meter	unit					
	meter	mg/L	°C	meter	ppt	meter	pH										
EC02A/	0	Surr	27	4	7.8	4	19.7	1	28	1	7.9		TS	MP 8/5			
EC02A/	1	Surr	27	4	7.7	4	20.3	1	28	1	8.1			BH 8/6			
EC02A/	2	Surr	27	4	7.7	4	20.2	1	28	1	8.6		MMB	MMB 8/7			
EC02A/	3	Surr	27	4	7.2	4	20.2	1	28	1	7.8	MMB		MMB 8/8			
EC02A/	4	Surr	27	4	7.7	4	20.4	1	28	1	8.0		BH	BH 8/9			
EC02A/	5	Surr	27	4	7.5	4	20.1	1	28	1	8.0			BH 8/10			
EC02A/	6	Surr	27	4	7.7	4	20.2	1	28	1	8.1	CR		CR 8/11			
EC02A/	7	Surr	27	4	7.8	4	20.4	1	28	1	8.2			CR 8/12			
EC02A/	8	Surr	27	4	7.8	4	19.9	1	28	1	8.1		MMB	MMB 8/13			
EC02A/	9	Surr	27	4	7.8	4	20.2	1	28	1	8.1			TS 8/14			
EC02A/	10	Surr	27	4	7.9	4	20.4	1	29	1	8.2		BH	BH 8/15			
EC02A/	11	Surr	27	4	7.8	4	20.3	1	29	1	8.2			MMB 8/16			
EC02A/	12	Surr	27	4	7.8	4	20.4	1	29	1	8.1	MMB		MMB 8/17			
EC02A/	13	Surr	27	4	7.7	4	20.3	1	27	1	8.1			TS 8/18			
EC02A/	14	Surr	27	4	8.0	4	20.4	1	27	1	8.2		MMB	MMB 8/19			
EC02A/	15	Surr	27	4	7.7	4	20.5	1	29	1	8.1	MMB		MMB 8/20			
EC02A/	16	Surr	27	4	7.6	4	20.4	1	29	1	8.2		TS	TS 8/21			
EC02A/	17	Surr	27	4	7.7	4	20.5	1	29	1	8.1			TS 8/22			
EC02A/	18	Surr	27	4	7.6	4	20.7	1	29	1	8.1	CR		CR 8/23			
EC02A/	19	Surr	27	4	7.4	4	21.0	1	29	1	7.9			CR 8/24			
EC02A/	20	Surr	27	4	7.4	4	20.7	1	28	1	7.9			CR 8/25			

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: 6.76649 Count: 19 -1s Warning Limit: 4.11978 -2s Action Limit: 2.50833
 Sigma: CV: 64.24% +1s Warning Limit: 11.1135 +2s Action Limit: 18.2533

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Mar	10	10.35175	3.58526	0.85689			14-2451-5687	14-3844-2284
2			10	8.38556	1.61908	0.43236			07-0179-9882	09-0608-4239
3			10	9.73577	2.96928	0.73325			12-2949-2561	10-8322-9812
4		Apr	19	7.70725	0.94077	0.26236			11-0689-5535	16-2728-6447
5			19	6.52448	-0.24200	-0.07340			06-6982-0696	07-7843-7824
6		Jun	23	2.61220	-4.15429	-1.91823	(-)		11-2423-7791	08-2080-8513
7		Jul	25	5.22653	-1.53996	-0.52044			15-7582-9934	07-9049-7308
8		Aug	31	8.86577	2.09928	0.54459			16-7169-3504	00-9849-6979
9		Dec	8	9.37175	2.60527	0.65645			10-5822-0812	08-7192-3895
10			8	9.37175	2.60527	0.65645			10-5822-0812	10-0140-9364
11	2007	May	11	8.16253	1.39604	0.37803			03-7778-9913	06-1785-2165
12		Jun	26	8.16258	1.39610	0.37804			09-6212-3109	14-8493-4946
13		Jul	18	2.13748	-4.62901	-2.32245	(-)	(-)	09-5163-0637	11-9760-1230
14		Sep	25	6.20193	-0.56456	-0.17558			06-6354-6111	12-2113-4941
15		Oct	24	9.76006	2.99358	0.73827			05-9113-1606	14-0319-5260
16			30	5.55412	-1.21237	-0.39792			03-0327-1386	13-6201-5780
17	2008	Feb	17	10.12762	3.36113	0.81278			11-6935-8907	04-7495-8038
18		Jul	2	10.30107	3.53458	0.84700			07-0160-7176	03-3190-0644
19			22	2.65108	-4.11540	-1.88845	(-)		12-3989-8103	10-4556-3131
20		Aug	5	5.30308	-1.46340	-0.49114			12-5764-3928	08-5080-2403

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	12-5764-3928	12-5764-3928	17 Sep-08 1:27 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	24.86%

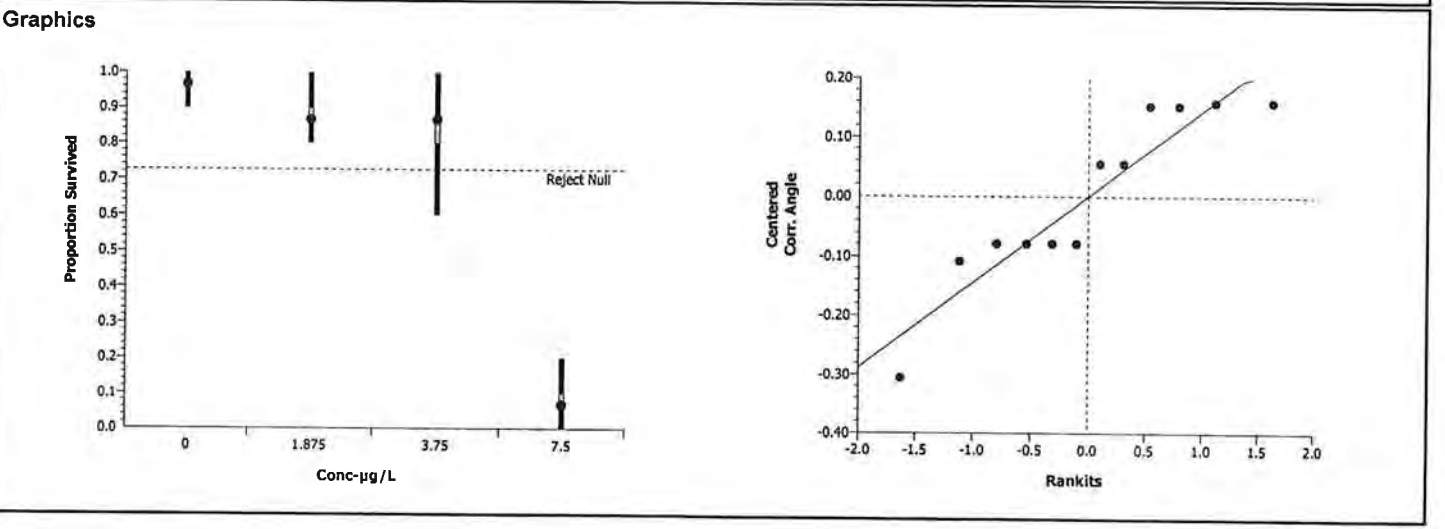
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		1.875	1.22602	2.41651	0.2624	0.33737	Non-Significant Effect
		3.75	1.18528	2.41651	0.2756	0.33737	Non-Significant Effect
		7.5	7.54093	2.41651	0.0001	0.33737	Significant Effect

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	2.047295	0.6824316	3	23.34	0.00026	Significant Effect
Error	0.2338967	0.0292371	8			
Total	2.28119135	0.7116687	11			

Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	1.96924	11.34487	0.57881	Equal Variances
Distribution	Shapiro-Wilk W	0.87074		0.06678	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	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409
1.875		3	0.86667	0.80000	1.00000	0.11547	1.18653	1.10715	1.34528	0.13749
3.75		3	0.86667	0.60000	1.00000	0.23094	1.19221	0.88608	1.34528	0.26512
7.5		3	0.06667	0.00000	0.20000	0.11547	0.30489	0.22551	0.46365	0.13749

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	0.90000	1.00000							
1.875		0.80000	0.80000	1.00000							
3.75		1.00000	1.00000	0.60000							
7.5		0.00000	0.20000	0.00000							



CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Regression	12-5764-3928	12-5764-3928	17 Sep-08 1:27 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)
9	-26.00000	-0.21089	0.10273	0.35484	9.97274	22.36203	0.69616	Non-Significant Heterogeneity

Point Estimates

% Effect	Conc-µg/L	95% LCL	95% UCL
10	3.916304	1.938472	4.925172
15	4.150085	2.21784	5.152421
20	4.345801	2.464394	5.348986
25	4.521047	2.693728	5.531627
40	4.994619	3.342185	6.071469
50	5.303083	3.772962	6.476242

Regression Parameters

Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)
Threshold	0.0666572	0.03718645	-0.00622824	0.1395426	1.793	0.09634	Not Significant
Slope	9.734387	2.958499	3.93573	15.53304	3.290	0.00586	Significant
Intercept	-2.05284	2.225763	-6.415336	2.309656	-0.922	0.37317	Not Significant

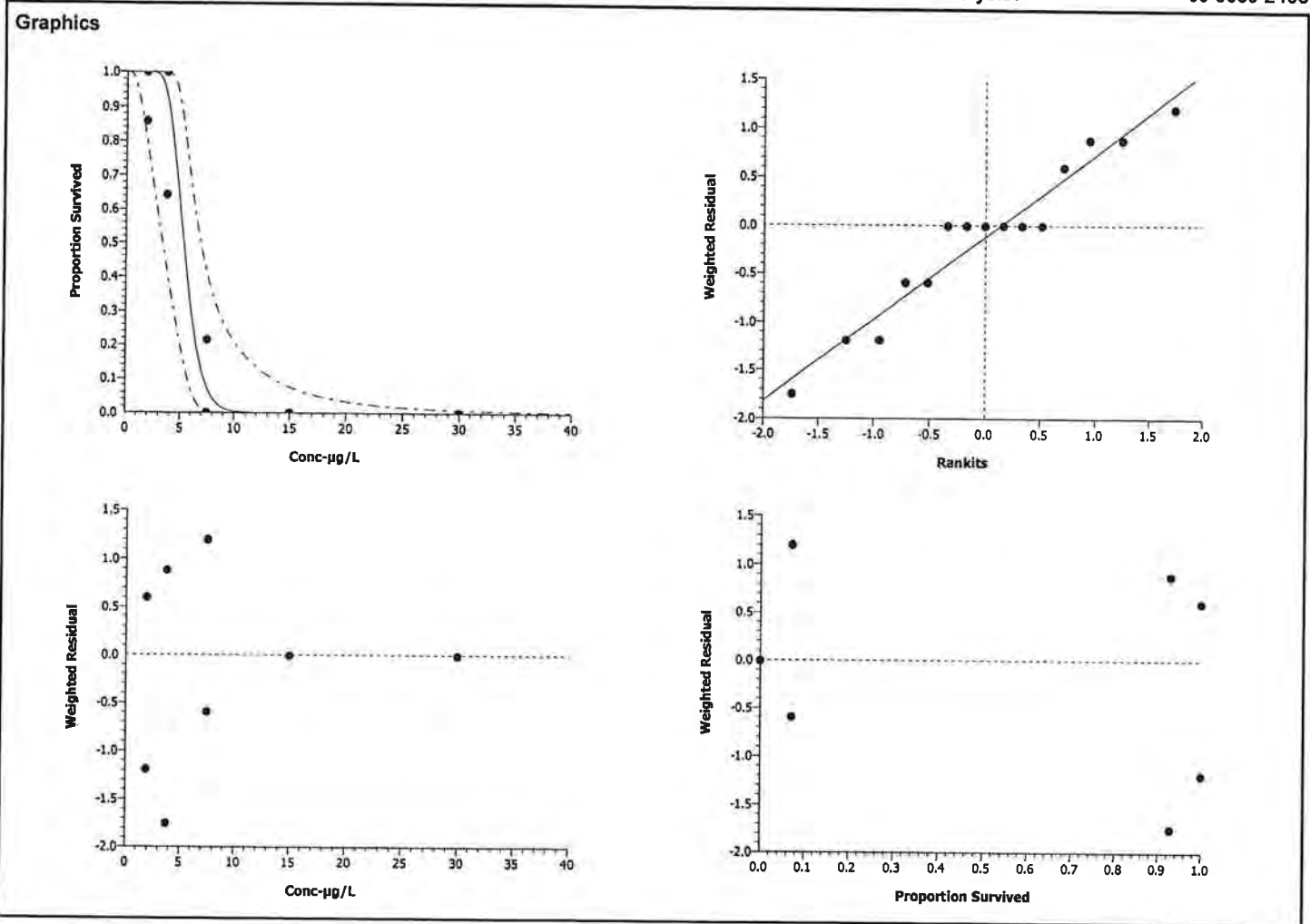
Residual Analysis

Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)
Variances	Modified Levene	1.535071	3.47805	0.26495	Equal Variances
Distribution	Shapiro-Wilk W	0.9391407		0.37169	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	0.96667	0.90000	1.00000	0.01179	0.05773	29	30
1.875		3	0.86667	0.80000	1.00000	0.02357	0.11547	13	15
3.75		3	0.86667	0.60000	1.00000	0.04714	0.23094	13	15
7.5		3	0.06667	0.00000	0.20000	0.02357	0.11547	1	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	30

CETIS Analysis Detail





96-HOUR REFERENCE TOXICANT TEST WATER QUALITY DATASHEET

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Neanthes arenaceodentata	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 1101-004-860	PROJECT MANAGER B. Hester	QUANTITY OF STOCK : 4.5 mL ACTUAL: 1500 4.5019g	QUANTITY OF DILUENT: 1500mL ACTUAL: 1500.2g	INIT TS
Test ID P080418.12	LOT #: 06510TC	TEST START DATE: 05Aug08	TEST END DATE 09Aug08	DATE PREP 8/5/08
		TIME 1900	TIME 1600	

WATER QUALITY DATA

DILTN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL				REFERENCE TOXICANT									
		cadmium chloride				cadmium									
TEST CONDITIONS															
CLIENT/ NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY	pH	TECHNICIAN				
	value	units			meter	mg/L	meter	°C				meter	unit		
Ref.Tox.-cadmium	0	mg/L	0	Stock	4	7.9	4	19.3	1	28	1	7.6	TS		
			1	Rep1	4	7.2	4	20.0	1	28	1	7.8	BH		
			2	Rep2	4	7.5	4	19.5	1	28	1	28	1	7.4	MMB
			3	Rep3	4	7.5	4	19.8	1	28	1	28	1	7.4	MMB
			4	Rep1	4	7.2	4	19.9	1	28	1	28	1	7.6	BH
Ref.Tox.-cadmium	1.875	mg/L	0	Stock	4	7.8	4	19.9	1	28	1	7.8	TS		
			1	Rep1	4	7.5	4	19.9	1	28	1	7.8	BH		
			2	Rep2	4	7.5	4	20.0	1	28	1	28	1	7.8	MMB
			3	Rep3	4	7.6	4	20.0	1	28	1	28	1	7.8	MMB
			4	Rep1	4	7.4	4	20.2	1	28	1	28	1	7.8	BH
Ref.Tox.-cadmium	3.75	mg/L	0	Stock	4	7.8	4	19.8	1	28	1	7.9	TS		
			1	Rep1	4	7.5	4	20.0	1	28	1	7.9	BH		
			2	Rep2	4	7.3	4	20.1	1	28	1	28	1	7.8	MMB
			3	Rep3	4	7.5	4	20.1	1	28	1	28	1	7.8	MMB
			4	Rep1	4	7.3	4	20.3	1	28	1	28	1	7.7	BH



96-HOUR REFERENCE TOXICANT TEST WATER QUALITY DATASHEET

WATER QUALITY DATA (Continued)

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SAL (ppt)		pH		TECHNICIAN		
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
CLIENT/ NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		WQ TECH			
	value	units			meter	mg/L	meter	°C	meter	ppt		meter	unit	
Ref.Tox.-cadmium	7.5	mg/L	0	Stock	4	7.8	4	19.9	1	28	1	7.9	TS	
			1	Rep 1	4	7.5	4	20.0	1	28	1	7.9	BH	
			2	Rep 2	4	7.3	4	20.1	1	28	1	7.9	MMB	
			3	Rep 3	4	6.9	4	20.2	1	28	1	7.8	MMB	
			4	Rep 2	4	7.4	4	20.3	1	28	1	7.9		
Ref.Tox.-cadmium	15	mg/L	0	Stock	4	7.8	4	19.9	1	28	1	7.9	TS	
			1	Rep 1	4	7.5	4	20.0	1	28	1	7.9	BH	
			2	Rep										
			3	Rep										
			4	Rep										
Ref.Tox.-cadmium	30	mg/L	0	Stock	4	7.8	4	19.9	1	28	1	7.9	TS	
			1	Rep 1	4	7.4	4	19.9	1	28	1	7.9	BH	
			2	Rep										
			3	Rep										
			4	Rep										

96-HOUR REFERENCE TOXICANT TEST OBSERVATION DATASHEET

NEWFIELDS

SPECIES <i>Neanthes arenaceodentata</i>
CLIENT Ecology & Environment
PROJECT Port Angeles
NEWFIELDS JOB # 1101-004-860
PROJECT MANAGER B. Hester
NEWFIELDS LAB Port Gamble Bath 3
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
Q= Quiescent

INITIAL # OF ORGANISMS
10/5

CLIENT/ NEWFIELDS ID	CONC.		REP	INITIAL NUMBER	DAY 1			DAY 2			DAY 3			DAY 4							
					value	units	DATE	TECHNICIAN	#ALIVE	#DEAD	OBS	DATE	TECHNICIAN	#ALIVE	#DEAD	OBS	DATE	TECHNICIAN	#ALIVE	#DEAD	OBS
Ref. Tox. - cadmium	0	mg/L	1	10	10	0	N	9	1	N	10	0	N	10	0	N					
			2	10	10	0	N	9	0	INB	9	0	N	9	0	N					
			3	10	10	0	N	10	0	N	10	0	N	10	0	N					
Ref. Tox. - cadmium	1.875	mg/L	1	5	5	0	1Q	5	0	N	4	1	N	4	0	N					
			2	5	5	0	N	5	0	1Q	5	0	1Q	4	1	N					
			3	5	5	0	N	5	0	N	5	0	N	5	0	N					
Ref. Tox. - cadmium	3.75	mg/L	1	5	5	0	N	5	0	N	5	0	N	5	0	N					
			2	5	5	0	N	5	0	N	5	0	Q	5	0	N					
			3	5	5	0	N	5	0	1Q	4	1	Q	3	1	N					
Ref. Tox. - cadmium	7.5	mg/L	1	5	4	1	Q	4	0	Q	0	4	N	—	—	—					
			2	5	4	1	Q	4	0	Q	1	3	N	1	0	Q					
			3	5	4	1	Q	4	0	Q	0	4	N	—	—	—					
Ref. Tox. - cadmium	15	mg/L	1	5	2	3	Q	0	2	N	—	—	—	—	—	—					
			2	5	2	3	Q	0	2	N	—	—	—	—	—	—					
			3	5	1	4	Q	0	1	N	—	—	—	—	—	—					
Ref. Tox. - cadmium	30	mg/L	1	5/10	0	10	—	—	—	—	—	—	—	—	—	—					
			2	5/10	0	10	—	—	—	—	—	—	—	—	—	—					
			3	5/10	0	10	—	—	—	—	—	—	—	—	—	—					

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

APPENDIX B

LABORATORY DOCUMENTS

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

LARVAL TESTS

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES
<i>Dendraster excentricus</i>

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
STOCKING DENSITY	1	NA	272	7/28/08	JG	
	2		319			
	3		302			
	4		340			
	5	↓	312			
Control /	1	260	3			
	2	253	11			
	3	254	11			
	4	270	18			
	5	265	7			
RF01A /	1	137 245	3 4			
	2	155 226	5 6			
	3	96 234	15 2			
	4	278	11			
	5	218	1			
RF02A /	1	217	9			
	2	236	5			
	3	276	1			
	4	240	10			
	5	204	2			
RF03A /	1	184	3			
	2	216	5			
	3	163	4			
	4	199	7			
	5	186	5	↓	↓	

① WC 7/28/08 ↓

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES <i>Dendraster excentricus</i>	
CLIENT Ecology & Environment	PROJECT Port Angeles
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner
NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
21 BA01A /	1	144	3	8/6/08	BH	
	2	103	1	↓	↓	
	3	61	3	↓	↓	QA: 59/3
	4	113	2	↓	↓	
	5	55	7	↓	↓	
26 EH02A /	1	160	1	↓	↓	
	2	200	3	↓	↓	
	3	215	5	↓	↓	
	4	213	4	↓	↓	
	5	181	5	↓	↓	
31 FP01A /	1	187	3	8/19/08	BH	
	2	206	4	↓	↓	
	3	209	3	↓	↓	
	4	191	4	↓	↓	
	5	165	2	↓	↓	
36 IE03A /	1	148	4	8/13/08	BH	
	2	136	4	↓	↓	
	3	151	5	↓	↓	
	4	144	1	↓	↓	
	5	163	0	↓	↓	
41 IE04A /	1	137	3	7/29/08	↓	
	2	155	5	↓	↓	
	3	96	15	↓	↓	QA 95/12
	4	141	2	8/13/08	BH	
	5	166	3	↓	↓	

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES <i>Dendraster excentricus</i>
CLIENT Ecology & Environment
PROJECT Port Angeles
JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner
NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
46 IE06A /	1	179	2	8/13/08	BH	
	2	83	17	↓	↓	
	3	118	0	↓	↓	
	4	157	5	↓	↓	
	5	77	7	↓	↓	
51 IE14A /	1	29	8	8/13/08	BH	
	2	179	4	↓	↓	
	3	93	16	↓	↓	
	4	128	11	↓	↓	
	5	123	20	↓	↓	
56 MA06A /	1	69	8	8/13/08	BH	
	2	125	8	↓	↓	
	3	79	2	↓	↓	
	4	66	14	↓	↓	
	5	146	5	↓	↓	
61 MA05A /	1	165	2	8/13/08	BH	
	2	158	3	↓	↓	
	3	123	3	↓	↓	
	4	182	2	↓	↓	
	5	94	0	↓	↓	
66 MA02A /	1	180	3	8/13/08	BH	
	2	116 120	4 5	↓	↓	QA check 120/5 new count used
	3	51	9	↓	↓	QA: 51/11
	4	115	4	↓	↓	
	5	140	1	↓	↓	

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
71 IE15A /	1	139	4	8/18/08	BH	
	2	154	2	↓	↓	
	3	105	2	↓	↓	
	4	55	18	↓	↓	
	5	133	2	↓	↓	
76 OH02A /	1	192	2	8/18/08	BH	
	2	202	4	↓	↓	
	3	217	3	↓	↓	
	4	187	3	↓	↓	
	5	233	3	↓	↓	
81 FT11A /	1	183	6	8/18/08	BH	
	2	194	4	↓	↓	
	3	162	0	↓	↓	
	4	119	2	↓	↓	
	5	149	4	↓	↓	
86 FT06A /	1	151	3	8/18/08	BH	
	2	210	3	↓	↓	
	3	151	3	↓	↓	
	4	192	1	↓	↓	
	5	166	2	↓	↓	
91 KP06A /	1	39	45	8/18/08	BH	
	2	217	2	↓	↓	
	3	160	5	↓	↓	
	4	178	1	↓	↓	
	5	167	3	↓	↓	

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
76 KP05A /	1	165	9	8/20/08	BH	
	2	132	6	↓	↓	
	3	135	0			
	4	127	5			
	5	120	1			
101 BL06A /	1	88	3			8/28/08
	2	136	0	↓	↓	
	3	50	19			
	4	149	5			
	5	85	17			

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
106 Eoh Control Sed /	1	256	6	8/20/08	BH	
	2					
	3					
	4					
	5					
111 0.45 filtered /	1	214	43	8/20/08	BH	
	2					
	3					
	4					
	5					
116 Geoduck Control /	1	278	8	8/20/08	BH	
	2					
	3					
	4					
	5					
121 CSMM Control /	1	247	7	8/20/08	BH	
	2					
	3					
	4					
	5					

NEWFIELDS

Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: E & E/ Port Angeles	Organism: <i>Dendroaster excentricus</i> larval batch 1	NewFields Test ID:	Test Duration (days):
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 1
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:	
7/22/08	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
RF01A	succ	7/22/08 CR	<0.5	18.5	7/22/08 MMB	N			0.012
RF02A			<0.5						0.032
RF03A			<0.5						0.316 ⁰ 0.032
BA01A			<0.5						0.444 ⁰ 0.320
EH02A			<0.5						0.246 ⁰ 0.450
FP01A			<0.5						0.358
IE03A			<0.5						0.358
IE04A			<0.5						0.366
IE06A			<0.5						0.280
IE14A			<0.5						0.366
MA06A			<0.5						0.376
MA05A			<0.5						0.340
MA02A			<0.5					<0.5 ⁰	0.398
IE15A			<0.5						0.528
OH02A			<0.5						0.738
FT11A			<0.5						0.398

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
FT06A	Sumr	7/22/08 CR	<0.5		7/22/08 MMB	N			0.448
KP06A	↓	↓	<0.5		↓	↓			0.394
KP05A	↓	↓	<0.5		↓	↓			0.610
BL06A	↓	↓	<0.5		↓	↓			0.418
Eoh Control Sed	↓	↓	<0.5		↓	↓			0.005
0.45 filtered	↓	↓	<0.5		↓	↓			0.000
Geoduck Control	↓	↓	<0.5		↓	↓			0.000
CSMM Control	↓	↓	<0.5		↓	↓			0.002
Control	↓	↓	<0.5		↓	↓			0.000

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22 Jul 08	TEST END DATE 1908	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	µg/L (Total)		
				>4.8	D.O.	16 ± 1	TEMP.	28 ± 1	SALINITY	7.8 ± 0.5	pH	NA	AMMONIA	NA	SULFIDE		
Control /	0	36	WQ Surr	4	7.6	4	15.4	R	28	S	7.8					↓	7/22
Control /	1	36	WQ Surr	4	7.7	4	15.4	R	28	S	8.2					↓	7/23
Control /	2	36	WQ Surr	4	7.4	4	15.3	R	28	S	7.7					TS	7/24
Control /	3	36	WQ Surr	4	6.9	4	15.4	I	28	I	7.8	BH	0.235	BH	0.008	BH	7/25
Control /	4	36	WQ Surr														
RF01A /	0	110	WQ Surr	4	7.8	4	16.1	R	28	S	7.8					↓	7/22
RF01A /	1	110	WQ Surr	4	7.3	4	15.0	R	28	S	7.9					↓	7/23
RF01A /	2	110	WQ Surr	4	7.2	4	15.3	R	28	S	7.6					TS	7/24
RF01A /	3	110	WQ Surr	4	6.5	4	15.6	I	28	I	7.8	BH	0.122	BH	0.003	BH	7/25
RF01A /	4	110	WQ Surr														
RF02A /	0	61	WQ Surr	4	7.4	4	15.7	R	29	S	7.9					↓	7/22
RF02A /	1	61	WQ Surr	4	7.8	4	15.4	R	28	S	7.9					↓	7/23
RF02A /	2	61	WQ Surr	4	6.3	4	15.4	R	28	S	7.6					TS	7/24
RF02A /	3	61	WQ Surr	4	6.3	4	15.6	I	28	I	7.8	BH	0.191	BH	0.005	BH	7/25
RF02A /	4	61	WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

① 7:25:06 BH 15

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 1900	TIME

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)	SALINITY		pH	Ammonia		Sulfide		FCH	DATE	
				meter	D.O.		meter	ppt		Techn.	AMMONIA	Techn.	NA			SULFIDE
RF03A/	0	46	WQ Surr	4	6.5	15.6	R	28	5	7.7				✓	7/22	
RF03A/	1	46	WQ Surr	4	6.2	15.4	R	29	5	7.9				✓	7/23	
RF03A/	2	46	WQ Surr	4	6.0	15.9	R	28	5	7.7				TS	7/24	
RF03A/	3	46	WQ Surr	4	3.8	15.5	I	28	1	7.7	BH	0.389	BH	0.007	BH	7/25
RF03A/	4	46	WQ Surr													
BA01A/	0	52	WQ Surr	4	6.6	15.5	R	29	5	7.8				✓	7/22	
BA01A/	1	52	WQ Surr	4	6.6	15.3	R	28	5	7.9				✓	7/23	
BA01A/	2	52	WQ Surr	4	6.3	15.9	R	28	5	7.7				TS	7/24	
BA01A/	3	52	WQ Surr	4	5.2	15.9	I	28	1	7.6	BH	0.222	BH	0.004	BH	7/25
BA01A/	4	52	WQ Surr													
EH02A/	0	68	WQ Surr	4	7.0	16.0	R	28	5	7.9				✓	7/22	
EH02A/	1	68	WQ Surr	4	7.2	15.2	R	28	5	7.9				✓	7/23	
EH02A/	2	68	WQ Surr	4	6.7	15.6	R	28	5	7.6				B	7/24	
EH02A/	3	68	WQ Surr	4	5.4	15.8	I	28	1	7.7	BH	0.329	BH	0.006	BH	7/25
EH02A/	4	68	WQ Surr													

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Dendroaster excentricus	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 1900	TIME

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

CLIENT/ NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	ng/L	meter	°C	meter	ppt	meter	unit	mg/L (total)	mg/L (Total)	NA	NA		
FP01A/	0	91	WQ Surr	4	7.3	4	16.1	R	28	5	7.8					A	7/22
FP01A/	1	91	WQ Surr	4	7.3	4	15.9	R	28	5	7.9					A	7/23
FP01A/	2	91	WQ Surr	4	6.4	4	15.3	R	28	5	7.6					TS	7/24
FP01A/	3	91	WQ Surr	4	5.5	4	15.6	I	28	1	7.8		BH 0.180	BH 0.007		BH	7/25
FP01A/	4	91	WQ Surr														
IE03A/	0	55	WQ Surr	4	6.6	4	15.6	R	28	5	7.8					A	7/22
IE03A/	1	55	WQ Surr	4	6.2	4	15.5	R	28	5	7.9					A	7/23
IE03A/	2	55	WQ Surr	4	6.0	4	15.9	R	28	5	7.7					TS	7/24
IE03A/	3	55	WQ Surr	4	3.9	4	15.9	I	28	1	7.7		BH 0.156	BH 0.009		BH	7/25
IE03A/	4	55	WQ Surr														
IE04A/	0	17	WQ Surr	4	6.3	4	15.7	R	28	5	7.9					A	7/22
IE04A/	1	17	WQ Surr	4	5.3	4	15.6	R	28	5	7.8					A	7/23
IE04A/	2	17	WQ Surr	4	5.1	4	15.8	R	28	5	7.7					TS	7/24
IE04A/	3	17	WQ Surr	4	5.0	4	15.8	I	28	1	7.7		BH 0.261	BH 0.004		BH	7/25
IE04A/	4	17	WQ Surr														

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 1900	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	TEST CONDITIONS		DO (mg/L) >4.8	Temp (°C) 16 ± 1	SALINITY ppt	pH 7.8 ± 0.5	Ammonia mg/L (total)	Sulfide mg/L (Total)	TECH	DATE
	DAY	Random #								
IE06A /	0	64	4	16.2	R 28	5				7/22
IE06A /	1	64	4	15.4	R 28	5				7/23
IE06A /	2	64	4	15.6	R 28	5			TS	7/24
IE06A /	3	64	4	15.6	R 28	1	BH 0.285	BH 0.010	BH	7/25
IE06A /	4	64								
IE14A /	0	75	4	15.4	R 28	5				7/22
IE14A /	1	75	4	15.5	R 28	5				7/23
IE14A /	2	75	4	15.7	R 28	5			TS	7/24
IE14A /	3	75	4	15.6	R 28	1	BH 0.259	BH 0.013	BH	7/25
IE14A /	4	75								
MA06A /	0	60	4	15.6	R 28	5				7/22
MA06A /	1	60	4	15.0	R 28	5				7/23
MA06A /	2	60	4	15.7	R 28	5			TS	7/24
MA06A /	3	60	4	15.8	R 28	5	BH 0.242	BH 0.008	BH	7/25
MA06A /	4	60								

01E 775.07 BH

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Dendroaster excentricus	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 1900	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH	Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt		Techn.	mg/L (total)	Techn.	mg/L (Total)		
MA05A /	0	18	WQ Surr	4	6.3	4	15.8	R	28	5	7.9				✓	7/22
MA05A /	1	18	WQ Surr	4	4.7	4	15.2	R	28	5	7.6				✓	7/23
MA05A /	2	18	WQ Surr	4	6.9	4	16.0	R	28	5	7.7				TS	7/24
MA05A /	3	18	WQ Surr	4	3.7	4	15.6	I	28	1	7.5	BH	0.195		BH	7/25
MA05A /	4	18	WQ Surr													
MA02A /	0	71	WQ Surr	4	5.6	4	16.1	R	28	5	7.8				✓	7/22
MA02A /	1	71	WQ Surr	4	5.8	4	15.9	R	28	5	7.9				✓	7/23
MA02A /	2	71	WQ Surr	4	5.2	4	15.8	R	28	5	7.7				TS	7/24
MA02A /	3	71	WQ Surr	4	4.9	4	16.0	I	28	1	7.8	BH	0.157		BH	7/25
MA02A /	4	71	WQ Surr													
IE15A /	0	38	WQ Surr	4	6.8	4	15.4	R	28	5	7.9				✓	7/22
IE15A /	1	38	WQ Surr	4	5.4	4	15.3	R	28	5	8.2				✓	7/23
IE15A /	2	38	WQ Surr	4	6.0	4	15.8	R	28	5	7.7				B	7/24
IE15A /	3	38	WQ Surr	4	4.4	4	14.8	I	28	1	7.7	BH	0.287		BH	7/25
IE15A /	4	38	WQ Surr													

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB/LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 1900	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	mg/L (total)	mg/L (total)	NA	NA		
OH02A/	0	118	WQ Surr	4	7.2	4	16.1	R	28	5	7.6					A	7/22
OH02A/	1	118	WQ Surr	4	5.5	4	15.5	R	29	5	7.9					A	7/23
OH02A/	2	118	WQ Surr	4	4.9	4	15.4	R	28	5	7.5					BS	7/24
OH02A/	3	118	WQ Surr	4	4.7	4	15.9	I	28	1	7.3					BH	7/25
OH02A/	4	118	WQ Surr														
FT11A/	0	112	WQ Surr	4	2.0	4	16.1	R	28	5	7.7					A	7/22
FT11A/	1	112	WQ Surr	4	5.6	4	15.6	R	29	5	7.9					A	7/23
FT11A/	2	112	WQ Surr	4	5.4	4	15.4	R	28	5	7.6					BS	7/24
FT11A/	3	112	WQ Surr	4	5.9	4	15.7	I	28	1	7.7					BH	7/25
FT11A/	4	112	WQ Surr														
FT06A/	0	65	WQ Surr	4	6.7	4	16.1	R	28	5	7.9					A	7/22
FT06A/	1	65	WQ Surr	4	6.2	4	15.7	R	28	5	7.9					A	7/23
FT06A/	2	65	WQ Surr	4	5.2	4	15.5	R	28	5	7.7					BS	7/24
FT06A/	3	65	WQ Surr	4	5.2	4	15.6	I	28	1	7.6					BH	7/25
FT06A/	4	65	WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Dendroaster excentricus	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE
		TIME 1900	PROTOCOL PSEP (1995)

WATER QUALITY DATA

CLIENT / NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	mg/L (Total)		
KP06A /	0	2445	WQ Surr	4	6.4	4	15.6	R	24	5	7.8					✓	7/22
KP06A /	1	2445	WQ Surr	4	5.2	4	14.8	R	28	5	8.0					✓	7/23
KP06A /	2	2445	WQ Surr	4	5.0	4	15.7	R	28	5	7.6					TS	7/24
KP06A /	3	2445	WQ Surr	4	5.5	4	15.8	I	28	1	7.8	0.201	BH	0.008		BH	7/25
KP06A /	4	2445	WQ Surr														
KP05A /	0	108	WQ Surr	4	6.5	4	16.2	R	28	5	7.7					✓	7/22
KP05A /	1	108	WQ Surr	4	6.8	4	15.8	R	28	5	7.9					✓	7/23
KP05A /	2	108	WQ Surr	4	4.9	4	15.4	R	28	5	7.6					TS	7/24
KP05A /	3	108	WQ Surr	4	6.3 _{S.A.}	4	15.4	I	28	1	7.7	0.326	BH	0.005		BH	7/25
KP05A /	4	108	WQ Surr														
BL06A /	0	43	WQ Surr	4	6.3	4	15.4	R	28	5	7.8					✓	7/22
BL06A /	1	43	WQ Surr	4	4.9	4	15.3	R	28	5	8.0					✓	7/23
BL06A /	2	43	WQ Surr	4	5.4	4	14.9	R	28	5	7.7					TS	7/24
BL06A /	3	43	WQ Surr	4	4.9	4	15.7	I	28	1	7.7	0.189	BH	0.005		BH	7/25
BL06A /	4	43	WQ Surr														

OVC 7-25-08 BH

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Dendroaster excentricus	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 1900
TIME 1900			
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	µg/L (Total)		
Eoh Control Sed /	0		WQ Surr	4	7.5	4	15.9	R	28	5	7.6					A	7/22
Eoh Control Sed /	1		WQ Surr	4	7.3	4	15.6	R	28	5	7.9					A	7/23
Eoh Control Sed /	2		WQ Surr	4	7.6	4	15.4	R	28	5	7.4					TS	7/24
Eoh Control Sed /	3		WQ Surr	4	7.0	4	15.6	1	28	1	7.8	BH	0.363	BH	0.004	BH	7/25
Eoh Control Sed /	4		WQ Surr														
0.45 filtered /	0		WQ Surr	4	7.4	4	16.0	R	28	5	7.4					A	7/22
0.45 filtered /	1		WQ Surr	4	7.9	4	15.0	R	28	5	7.9					A	7/23
0.45 filtered /	2		WQ Surr	4	7.6	4	15.6	R	28	5	7.3					TS	7/24
0.45 filtered /	3		WQ Surr	4	7.1	4	15.9	1	28	1	7.8	BH	0.299	BH	0.007	BH	7/25
0.45 filtered /	4		WQ Surr														
Geoduck Control /	0		WQ Surr	4	7.8	4	15.4	R	28	5	7.5					A	7/22
Geoduck Control /	1		WQ Surr	4	7.8	4	15.0	R	28	5	7.9					A	7/23
Geoduck Control /	2		WQ Surr	4	7.8	4	15.5	R	28	5	7.5					TS	7/24
Geoduck Control /	3		WQ Surr	4	7.2	4	16.0	1	28	1	7.8	BH	0.204	BH	0.002	BH	7/25
Geoduck Control /	4		WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

① WC to 7/24/08

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

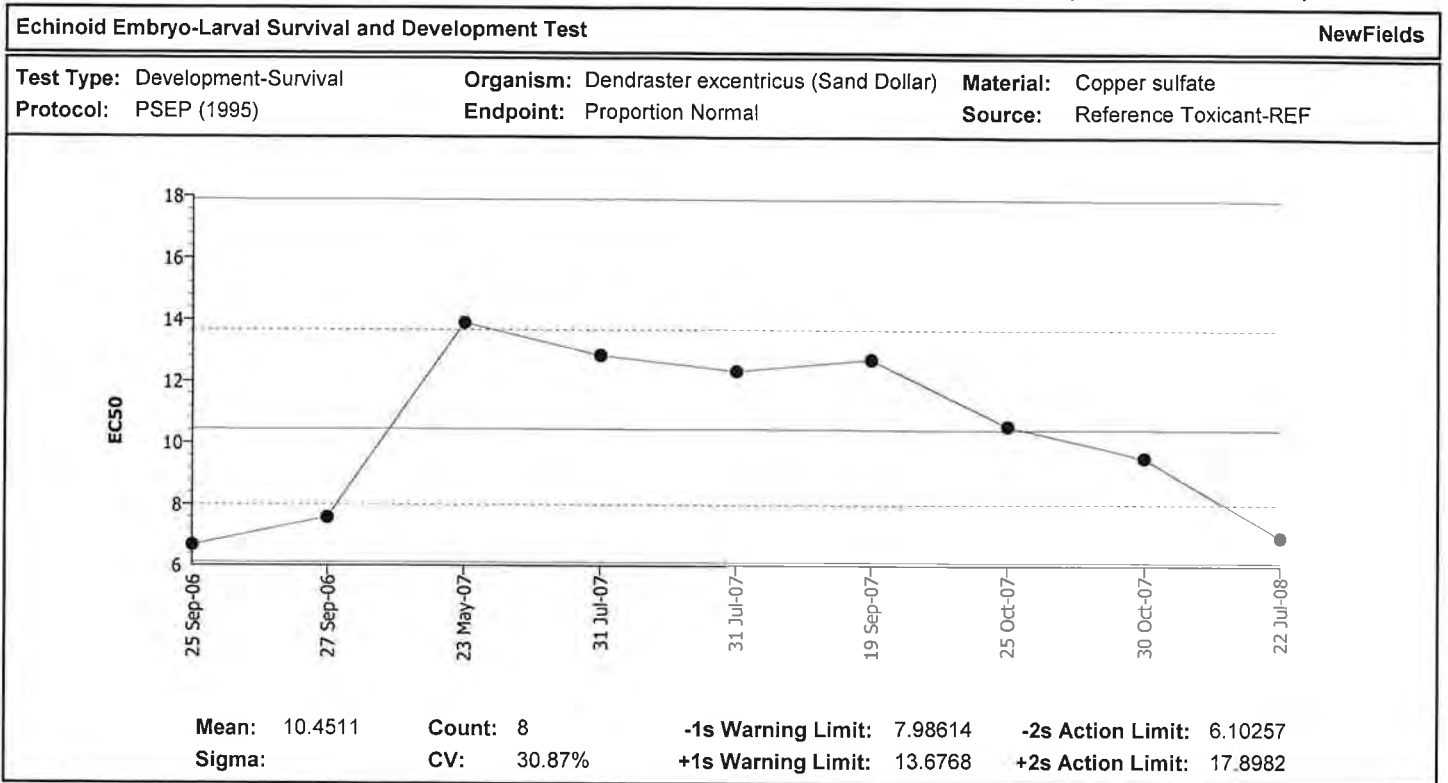
CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 22Jul08	TEST END DATE 7/25/08
		TIME 1900	TIME 1800

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	>4.8	meter	16 ± 1	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	mg/L (Total)		
CSMM Control /	0		WQ Surr	4	7.6	4	15.3	R	28	5	8.2	.				J	7/22
CSMM Control /	1		WQ Surr	4	7.7	4	16.5	R	28	5	8.1					J	7/23
CSMM Control /	2		WQ Surr	4	7.4	4	15.8	R	28	5	8.2					TS	7/24
CSMM Control /	3		WQ Surr	4	6.4	4	14.6	1	27	1	8.4	BA	0.318	BA	0.008	BH	7/25
CSMM Control /	4		WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

CETIS QC Chart



Quality Control Data										
Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Sep	25	6.66180	-3.78928	-1.67405	(-)		15-9124-4449	12-6731-0558
2			27	7.56297	-2.88811	-1.20240	(-)		12-0508-6315	07-3739-8798
3	2007	May	23	13.89896	3.44788	1.05990	(+)		01-4296-4787	05-7613-5311
4		Jul	31	12.85222	2.40114	0.76882			13-9151-2777	12-8049-9522
5			31	12.33174	1.88066	0.61514			02-7352-2736	12-1169-5876
6		Sep	19	12.73121	2.28013	0.73366			09-8513-0350	13-2299-3806
7		Oct	25	10.57427	0.12319	0.04356			12-7566-1317	15-3106-2890
8			30	9.52576	-0.92532	-0.34463			12-1647-2406	05-3030-1731
9	2008	Jul	22	6.93340	-3.51768	-1.52550	(-)		20-1766-4632	11-5915-4021

CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Combined Proportion Normal	Comparison	16-8346-3843	16-8346-3843	23 Sep-08 10:21 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		2.5	5	40	3.53553	9.59%

Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	1.72758	2.46559	0.1551	0.08395	Non-Significant Effect
		5	4.46136	2.46559	0.0020	0.08395	Significant Effect
		10	20.918	2.46559	0.0000	0.08395	Significant Effect
		20	30.3647	2.46559	0.0000	0.08395	Significant Effect

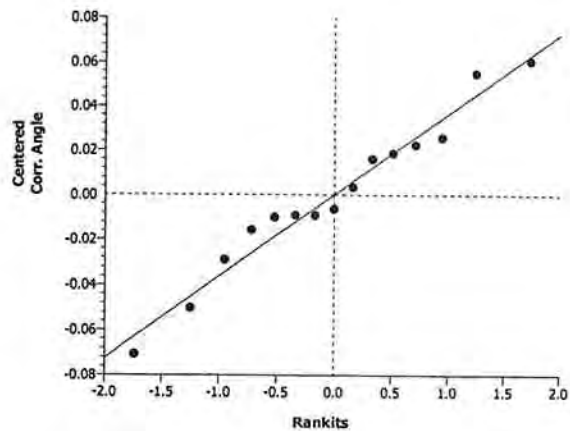
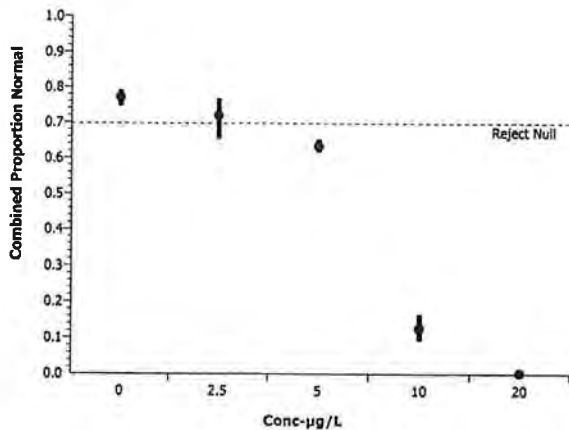
ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	2.510864	0.6277161	4	360.93	0.00000	Significant Effect
Error	0.0173914	0.0017391	10			
Total	2.5282557	0.6294552	14			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	4.61476	13.27670	0.32916	Equal Variances
Distribution	Shapiro-Wilk W	0.96988		0.85634	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	0.76994	0.74540	0.79141	0.02316	1.07086	1.04190	1.09650	0.02745
2.5		3	0.71779	0.65337	0.76687	0.05828	1.01204	0.94129	1.06691	0.06430
5		3	0.63190	0.61656	0.65337	0.01916	0.91895	0.90305	0.94129	0.01991
10		3	0.12474	0.09202	0.16564	0.03749	0.35860	0.30821	0.41916	0.05617
20		3	0.00102	0.00000	0.00307	0.00177	0.03694	0.02770	0.05541	0.01600

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	0.77301	0.74540	0.79141							
2.5		0.65337	0.73313	0.76687							
5		0.62577	0.61656	0.65337							
10		0.11656	0.09202	0.16564							
20		0.00000	0.00000	0.00307							

Graphics



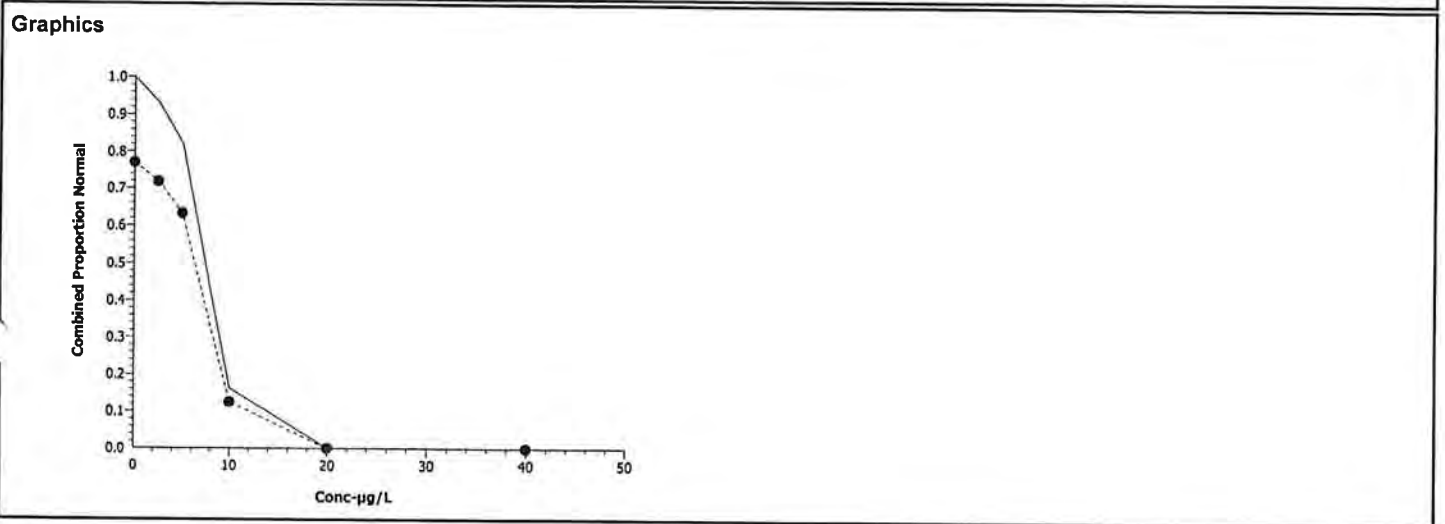
CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Combined Proportion Normal	Trimmed Spearman-Karber	16-8346-3843	16-8346-3843	23 Sep-08 10:21 AM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0.2300614	6.77%	0.8366904	0.005855092	6.86579	6.68313	7.05343

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.76994	0.74540	0.79141	0.00473	0.02316	753	978
2.5		3	0.71779	0.65337	0.76687	0.01190	0.05828	702	978
5		3	0.63190	0.61656	0.65337	0.00391	0.01916	618	978
10		3	0.12474	0.09202	0.16564	0.00765	0.03749	122	978
20		3	0.00102	0.00000	0.00307	0.00036	0.00177	1	978
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	978



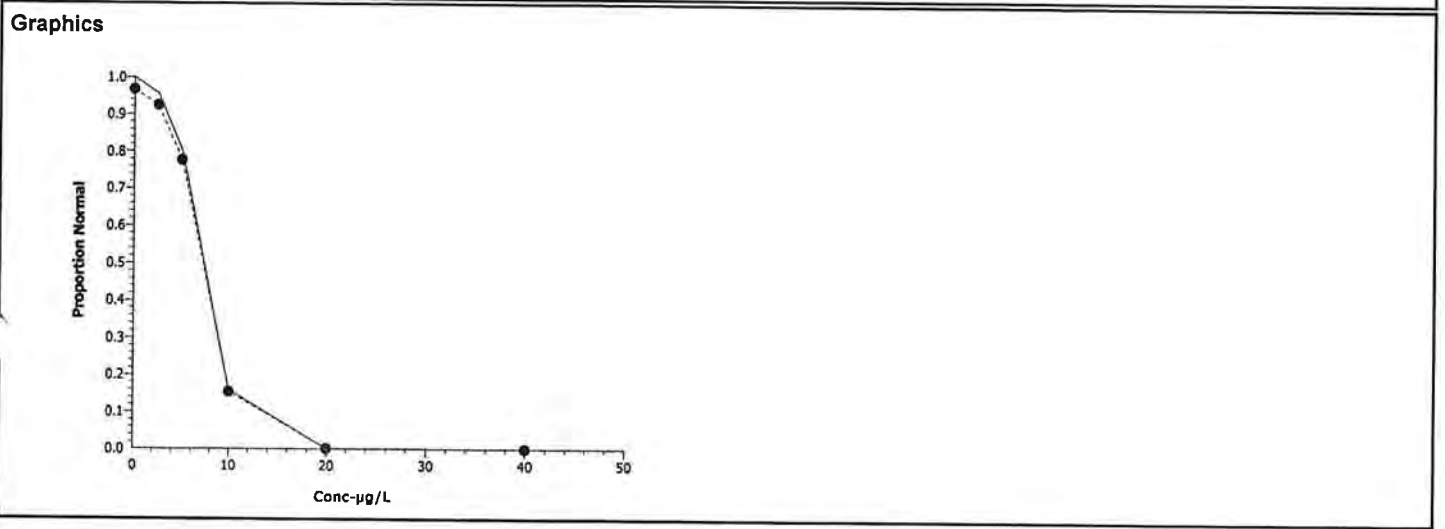
CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Normal	Trimmed Spearman-Karber	16-8346-3843	16-8346-3843	23 Sep-08 10:21 AM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0.03337612	4.44%	0.8319322	0.006350399	6.79098	6.59525	6.99251

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.96650	0.95669	0.98099	0.00261	0.01280	753	779
2.5		3	0.92302	0.90638	0.94697	0.00434	0.02126	702	760
5		3	0.77743	0.74725	0.81048	0.00647	0.03171	618	796
10		3	0.15375	0.11194	0.19853	0.00885	0.04337	122	792
20		3	0.00115	0.00000	0.00346	0.00041	0.00200	1	792
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	766



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Normal	Comparison	16-8346-3843	16-8346-3843	23 Sep-08 10:21 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		<2.5	2.5		N/A	3.61%

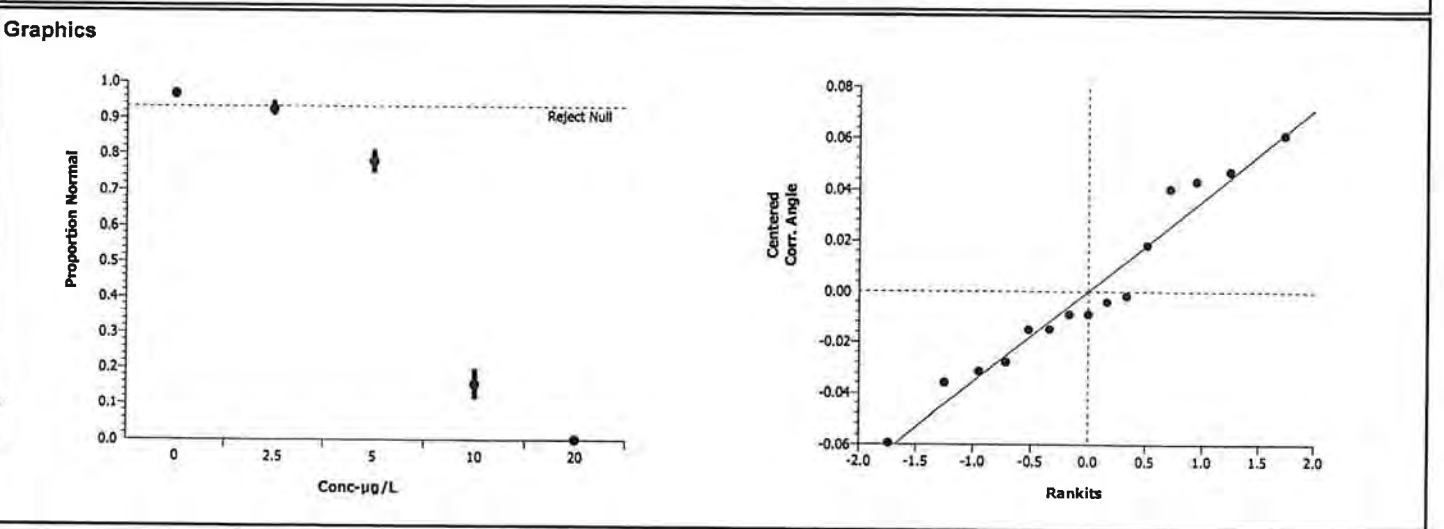
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	2.9004	2.46559	0.0247	0.08311	Significant Effect
		5	9.17017	2.46559	0.0000	0.08311	Significant Effect
		10	29.3299	2.46559	0.0000	0.08311	Significant Effect
		20	40.0081	2.46559	0.0000	0.08311	Significant Effect

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	4.185812	1.046453	4	613.96	0.00000	Significant Effect
Error	0.0170442	0.0017044	10			
Total	4.20285624	1.0481574	14			

Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	2.45180	13.27670	0.65329	Equal Variances
Distribution	Shapiro-Wilk W	0.94665		0.47328	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	0.96650	0.95669	0.98099	0.01280	1.38927	1.36116	1.43247	0.03798
2.5		3	0.92302	0.90638	0.94697	0.02126	1.29150	1.25984	1.33843	0.04146
5		3	0.77743	0.74725	0.81048	0.03171	1.08015	1.04403	1.12039	0.03834
10		3	0.15375	0.11194	0.19853	0.04337	0.40059	0.34115	0.46181	0.06035
20		3	0.00115	0.00000	0.00346	0.00200	0.04064	0.03150	0.05886	0.01578

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	0.96183	0.95669	0.98099							
2.5		0.90638	0.91571	0.94697							
5		0.74725	0.81048	0.77455							
10		0.15079	0.11194	0.19853							
20		0.00000	0.00000	0.00346							



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	16-8346-3843	16-8346-3843	23 Sep-08 10:22 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		40	>40	2.5	N/A	13.03%

Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.46929	2.5023	0.6619	0.11971	Non-Significant Effect
		5	-0.4923	2.5023	0.9376	0.11971	Non-Significant Effect
		10	-0.364	2.5023	0.9176	0.11971	Non-Significant Effect
		20	-0.4387	2.5023	0.9298	0.11971	Non-Significant Effect
		40	0.30828	2.5023	0.7277	0.11971	Non-Significant Effect

ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	0.0057537	0.0011507	5	0.34	0.88201	Non-Significant Effect
Error	0.0411989	0.0034332	12			
Total	0.04695255	0.004584	17			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	3.49816	15.08627	0.62367	Equal Variances
Distribution	Shapiro-Wilk W	0.91461		0.10378	Normal Distribution

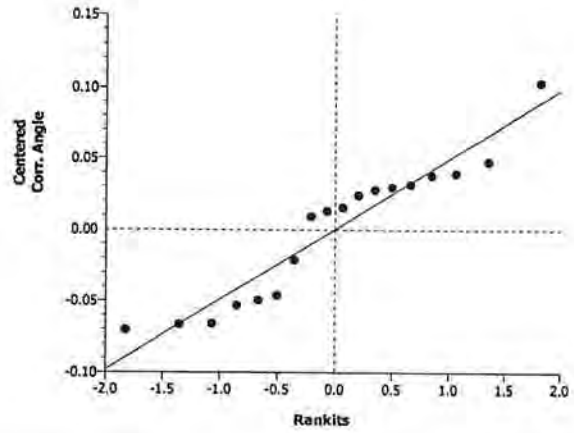
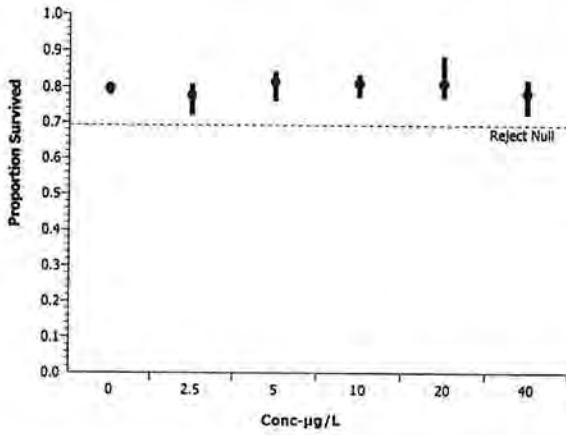
Data Summary											
Conc-µg/L	Control Type	Count	Original Data				Transformed Data				
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD	
0	Dilution Water	3	0.79652	0.77914	0.80675	0.01513	1.10299	1.08156	1.11564	0.01866	
2.5		3	0.77710	0.72086	0.80982	0.04892	1.08054	1.01415	1.11953	0.05778	
5		3	0.81391	0.76074	0.84356	0.04615	1.12654	1.05969	1.16415	0.05805	
10		3	0.80982	0.77301	0.83436	0.03246	1.12040	1.07420	1.15164	0.04083	
20		3	0.80982	0.76994	0.88650	0.06643	1.12397	1.07054	1.22718	0.08940	
40		3	0.78323	0.72393	0.82209	0.05218	1.08824	1.01758	1.13537	0.06232	

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	0.80368	0.77914	0.80675							
2.5		0.72086	0.80061	0.80982							
5		0.83742	0.76074	0.84356							
10		0.77301	0.82209	0.83436							
20		0.77301	0.76994	0.88650							
40		0.72393	0.82209	0.80368							

Graphics



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

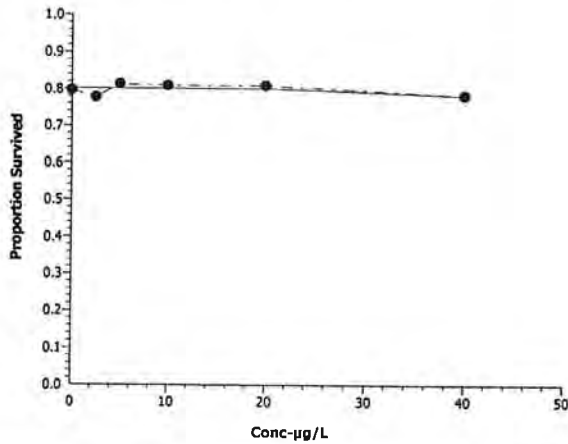
Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Interpolation	16-8346-3843	16-8346-3843	23 Sep-08 10:22 AM	CETISv1.1.2

Linear Interpolation Options					
X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Log(X + 1)	Linear	57951	200	Yes	Two-Point Interpolation

Point Estimates			
% Effect	Conc-µg/L	95% LCL	95% UCL
5	> 40	N/A	N/A
10	> 40	N/A	N/A
15	> 40	N/A	N/A
20	> 40	N/A	N/A
25	> 40	N/A	N/A
40	> 40	N/A	N/A
50	> 40	N/A	N/A

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.79652	0.77914	0.80675	0.00309	0.01513	779	978
2.5		3	0.77710	0.72086	0.80982	0.00999	0.04892	760	978
5		3	0.81391	0.76074	0.84356	0.00942	0.04615	796	978
10		3	0.80982	0.77301	0.83436	0.00663	0.03246	792	978
20		3	0.80982	0.76994	0.88650	0.01356	0.06643	792	978
40		3	0.78323	0.72393	0.82209	0.01065	0.05218	766	978

Graphics



BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	QUANTITY OF TOXICANT: 0.039 mL	QUANTITY OF DILUENT: 500mL	INIT TS
TEST ID P07.0930.47	LOT #: 1704237	TEST START DATE: 7/22/08	ACTUAL: 500.48	TIME 1700
		TEST END DATE: 7/25/08	TIME 1925	

WATER QUALITY DATA

DIL.TIN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL				REFERENCE TOXICANT				
FSW072208.01				Copper Sulfate				Copper				
CLIENT/NEWFIELDS ID	CONCENTRATION		DAY	REP	DO (mg/L)		TEMP(C)	SAL (ppt)		pH	TECH	DATE
	value	units			meter	mg/L		meter	ppt			
Ref.Tox.-Copper	0	µg/L	0	Stock	4	7.5	15.6	R	28	5	J	7/22
				Stock	4	8.3	15.8	I	28	1	BH	7/25
Ref.Tox.-Copper	2.5	µg/L	0	Stock	4	7.8	15.7	R	28	5	J	7/22
				Stock	4	8.3	15.7	I	28	1	BH	7/25
Ref.Tox.-Copper	5	µg/L	0	Stock	4	7.8	15.7	R	28	5	J	7/22
				Stock	4	8.3	15.7	I	28	1	BH	7/25
Ref.Tox.-Copper	10	µg/L	0	Stock	4	7.8	15.7	R	28	5	J	7/22
				Stock	4	8.3	15.7	I	28	1	BH	7/25
Ref.Tox.-Copper	20	µg/L	0	Stock	4	7.7	15.7	R	28	5	J	7/22
				Stock	4	8.3	15.7	I	28	1	BH	7/25
Ref.Tox.-Copper	40	µg/L	0	Stock	4	7.7	15.6	R	28	5	J	7/22
				Stock	4	8.3	15.7	I	29	1	BH	7/25

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST DATA SHEET 1



SPECIES <i>Dendroaster excentricus</i>	
CLIENT Ecology & Environment	PROJECT Port Angeles
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner
NEWFIELDS LAB / LOCATION Port Gamble / Incubator	PROTOCOL PSEP (1995)

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	252 NA	10330	7/28/08	J	
				2	243 33	11330	8/21/08	CR	
				3	258	3185	↓	↓	
Ref.Tox. - Copper	2.5	µg/L		1	213	3322			
				2	239	22	8/21/08	CR	
				3	250	14			
Ref.Tox. - Copper	5	µg/L		1	204	69			
				2	201	47			
				3	213	62			
Ref.Tox. - Copper	10	µg/L		1	38	214			
				2	30	238			
				3	54	218			
Ref.Tox. - Copper	20	µg/L		1	0	252			
				2	0	251			
				3	1	288			
Ref.Tox. - Copper	40	µg/L		1	0	236			
				2	0	268			
				3	0	262	↓	↓	

STOCKING DENSITY	1	NA	330			
	2	↓	330			
	3	↓	318			

① WC 7/28/08 ↓

BIVALVE LARVAE SUSPENDED PARTICULATE FILTER TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER	NUMBER	DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
STOCKING DENSITY	1	NA	279	7/29/08	BSH	
	2	↓	354	↓	↓	
	3	↓	282	↓	↓	
	4	↓	274	↓	↓	
	5	↓	315	↓	↓	
Control /	1	286	8	7/29/08	BSH	
	2	309	11	↓	↓	
	3	264	7	7/30/08	BSH	
	4	278	7	↓	↓	
	5	268	8	↓	↓	
6 RF03A /	1	208	2	↓	↓	
	2	232	8	↓	↓	
	3	223	9	↓	↓	
	4	220	7	↓	↓	
	5	245	11	↓	↓	
11 RF01A /	1	238	2	↓	↓	
	2	249	1	↓	↓	
	3	236	2	↓	↓	
	4	288	4	↓	↓	
	5	261	4	↓	↓	
16 RF02A /	1	272	3	7/30/08	BSH	
	2	247	7	8/21/08	st	
	3	254	3	↓	↓	
	4	223	3	↓	↓	
	5	240	3	↓	↓	

BIVALVE LARVAE SUSPENDED PARTICULATE PARTICULATE TEST



SPECIES <i>Dendraster excentricus</i>		
CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS	
		NORMAL	ABNORMAL				
21 BL04A/	1	192	11	8/21/08	✓		
	2	199	5	↓	↓		
	3	181	6				
	4	212	8				
	5	172	3			✓	✓
26 BL03A/	1	54	86			8/21/08	✓
26 BL03A/	2	124	44	↓	↓		
	3	210	21				
	4	216	17				
	5	188	14				
	31 BL02A/	1	267			11	↓
31 BL02A/	2	215	15				
	3	239	7				
	4	208	7				
	5	139	25				
	36 EI07A/	1	246	5	↓	↓	
36 EI07A/	2	237	5				
	3	211	4				
	4	232	6				
	5	189	6	9/3/08			BH
	41 FT01A/	1	191	3	9/3/08	BH	
41 FT01A/	2	219	2	↓	↓		
	3	216	4				
	4	226	6				
	5	111	21				

BIVALVE LARVAE SUSPENDED PARTICULATE PARTICULATE TEST



SPECIES <i>Dendraster excentricus</i>				
CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
PROTOCOL PSEP (1995)				

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
46 FT04A /	1	249	3	9/3/00	BH	
	2	251	4	↓	↓	
	3	243	1	↓	↓	
	4	259	6	↓	↓	
	5	236	7	↓	↓	
51 IE09A /	1	131	16	↓	↓	
	2	156	4	↓	↓	
	3	170	0	↓	↓	
	4	166	2	↓	↓	
	5	163	2	↓	↓	
56 IH01A /	1	205	6	↓	↓	
	2	243	9	↓	↓	
	3	238	6	↓	↓	
	4	218	8	↓	↓	
	5	230	2	↓	↓	
61 IH02A /	1	172	5	9/4/00	BH	
	2	165	1	↓	↓	
	3	139	4	↓	↓	
	4	163	5	↓	↓	
	5	164	3	↓	↓	
66 IH03A /	1	160	5	9/4/00	BH	
	2	161	1	↓	↓	
	3	175	0	↓	↓	
	4	131	3	↓	↓	
	5	192	1	↓	↓	

BIVALVE LARVAE SUSPENDED PARTICULATE PERSISTENCE TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
71 IH05A /	1	214	3	9/4/08	BH	
	2	231	2			
	3	197	1			
	4	199	3			
	5	239	3			
76 IH06A /	1	172	4			
	2	179	2			
	3	179	0			
	4	201	2			
	5	170	1			
81 KP01A /	1	152	19			
	2	222	2			
	3	205	0			
	4	224	7			
	5	60	42			
86 KP02A /	1	214	3			
	2	167	15			
	3	134	19			
	4	172	1			
	5	201	9			
91 KP03A /	1	248	5			
	2	260	4			
	3	223	3			
	4	259	4			
	5	219	10			

BIVALVE LARVAE SUSPENDED PARTICULATE PIPE TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
76 MA01A /	1	224	1	9/4/08	BW	
	2	203	15			
	3	223	3			
	4	243	9			
	5	140	28			
101 BL01A /	1	150	41			
	2	36	30			
	3	193	11			
	4	74	64			
	5	172	113			

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
Ech Control /	1	247	2	9/4/08	BH	
	2	278	1	↓	↓	
	3	224	5	↓	↓	
	4	227	4	↓	↓	
	5	215	1	↓	↓	



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E & E/ Port Angeles	Organism: <i>Dendraster excentricus</i> Larval, Batch 2	NewFields Test ID: 1101-004-860	Test Duration (days):
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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:	

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.		40.5						0.000
RF03A	Surr.		40.5						0.000
RF01A	Surr.		40.5						0.000
RF02A	Surr.		40.5						0.000
BL04A	Surr.		40.5						0.000
BL03A	Surr.		40.5						0.000
BL02A	Surr.		40.5						0.001
EI07A	Surr.		40.5						0.000
FT01A	Surr.		40.5						0.000
FT04A	Surr.		40.5						0.000
IE09A	Surr.		40.5						0.004
IH01A	Surr.		40.5						0.018
IH02A	Surr.		40.5						0.005
IH03A	Surr.		40.5						0.009
IH05A	Surr.		40.5						0.004
IH06A	Surr.		40.5						0.006

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
KP01A	Surr.		<0.5						0.002
KP02A	Surr.		<0.5						0.001
KP03A	Surr.		<0.5						0.002
MA01A	Surr.		<0.5						0.006
BL01A	Surr.		<0.5						0.002

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 7/28/08	TIME 1800

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	ng/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	mg/L (Total)		
Control /	0	94	WQ Surr	4	7.0	4	16.1	1	28	1	8.1	BH	0.006	BH	0.006	J	7/25/08
Control /	1	94	WQ Surr	4	7.1	4	16.0	1	28	1	8.2					BH	7/26/08
Control /	2	94	WQ Surr	4	7.1	4	15.6	1	28	1	8.1					BH	7/27/08
Control /	3	94	WQ Surr	4	6.9	4	15.9	1	28	1	7.7					CR	7/28
Control /	4	94	WQ Surr														
RF03A /	0	120	WQ Surr	4	5.8	4	15.7	1	28	1	7.9	BH	0.014	BH	0.014	J	7/25/08
RF03A /	1	120	WQ Surr	4	6.4	4	15.8	1	28	1	8.1					BH	7/26/08
RF03A /	2	120	WQ Surr	4	6.4	4	15.6	1	28	1	7.9					BH	7/27/08
RF03A /	3	120	WQ Surr	4	7.2 5.9	4	15.8 15.5	1	28	1	7.7					CR	7/28
RF03A /	4	120	WQ Surr														
RF01A /	0	91	WQ Surr	4	6.9	4	15.6	1	28	1	8.1	BH	0.006	BH	0.006	J	7/25/08
RF01A /	1	91	WQ Surr	4	7.2	4	15.9	1	28	1	8.1					BH	7/26/08
RF01A /	2	91	WQ Surr	4	7.3	4	15.6	1	28	1	8.0					BH	7/27/08
RF01A /	3	91	WQ Surr	4	7.2	4	15.8	1	28	1	7.7					CR	7/28
RF01A /	4	91	WQ Surr														

DWC CR 7/28

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2215	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	>4.8	meter	16 ± 1	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	mg/L (Total)		
RF02A/	0	60	WQ Surr	4	7.1	4	15.6	1	28	8.1	BH	0.0762	BH	0.010	✓	7/25/08	
RF02A/	1	60	WQ Surr	4	6.7	4	15.9	1	28	8.1					BH	7/26/08	
RF02A/	2	60	WQ Surr	4	6.7	4	15.6	1	28	8.0					BH	7/27/08	
RF02A/	3	60	WQ Surr	4	6.8	4	15.1	1	28	7.8					CR	7/28	
RF02A/	4	60	WQ Surr														
BLO4A/	0	59	WQ Surr	4	6.0	4	15.2	1	28	8.1	BH	0.0896	BH	0.012	✓	7/25/08	
BLO4A/	1	59	WQ Surr	4	4.7 ^{0.8}	4	15.6	1	28	8.1					BH	7/26/08	
BLO4A/	2	59	WQ Surr	4	8.0	4	16.2	1	28	8.0					BH	7/27/08	
BLO4A/	3	59	WQ Surr	4	8.1	4	15.8	1	28	7.9					CR	7/28	
BLO4A/	4	59	WQ Surr														
BLO3A/	0	40	WQ Surr	4	5.5	4	15.4	1	28	8.0	BH	0.297	BH	0.009	✓	7/25/08	
BLO3A/	1	40	WQ Surr	4	6.0	4	16.3	1	28	8.1					BH	7/26/08	
BLO3A/	2	40	WQ Surr	4	6.0	4	15.6	1	28	7.8					BH	7/27/08	
BLO3A/	3	40	WQ Surr	4	4.8	4	15.6	1	28	7.7					CR	7/28	
BLO3A/	4	40	WQ Surr														

Aerated
see below

① Gently aerated for 1 hour to bring DO levels within range. DO after aeration 4.8 mg/L - chambers will remain on aeration overnight 7.26.08 BH
 ② IE 7/27.08 BH
 ③ IE 7/28 CR

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2115	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	mg/L (total)	Techn.	mg/L (Total)	Techn.		
BLO2A /	0	41	WQ Surr	4	6.0	4	15.5	1	28	1	8.0	BH	0.198	BH	0.012	J	7/25/08
BLO2A /	1	41	WQ Surr	4	6.3	4	16.2	1	28	1	8.0					BH	7/26/08
BLO2A /	2	41	WQ Surr	4	6.0	4	15.7	1	28	1	7.9					BH	7/27/08
BLO2A /	3	41	WQ Surr	4	5.0	4	15.5	1	28	1	7.7					CR	7/28
BLO2A /	4	41	WQ Surr														
EI07A /	0	31	WQ Surr	4	5.7	4	15.6	1	28	1	8.0	BH	0.323	BH	0.016	J	7/25/08
EI07A /	1	31	WQ Surr	4	5.8	4	14.5	1	28	1	8.1					BH	7/26/08
EI07A /	2	31	WQ Surr	4	6.5	4	15.6	1	28	1	7.9					BH	7/27/08
EI07A /	3	31	WQ Surr	4	5.1	4	15.3	1	28	1	7.7					CR	7/28
EI07A /	4	31	WQ Surr														
FT01A /	0	57	WQ Surr	4	6.4	4	15.5	1	28	1	8.0	BH	0.128	BH	0.017	J	7/25/08
FT01A /	1	57	WQ Surr	4	6.5	4	16.1	1	28	1	8.1					BH	7/26/08
FT01A /	2	57	WQ Surr	4	6.1	4	15.5	1	28	1	7.9					BH	7/27/08
FT01A /	3	57	WQ Surr	4	6.8	4	15.4	1	28	1	7.7					CR	7/28
FT01A /	4	57	WQ Surr														

OWP CR 7/28

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2215	TIME

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

CLIENT/NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	NA		
FT04A /	0	33	WQ Surr	4	6.0	4	15.3	28	28	5	8.0	BH	0.231	BH	0.016	J	7/25/08
FT04A /	1	33	WQ Surr	4	6.1	4	16.2	28	28	1	8.0					BH	7/26/08
FT04A /	2	33	WQ Surr	4	6.1	4	15.4	28	28	1	7.9					BH	7/27/08
FT04A /	3	33	WQ Surr	4	5.6	4	15.7	28	28	1	7.6					CR	7/28
FT04A /	4	33	WQ Surr														
IE09A /	0	1	WQ Surr	4	5.9	4	15.3	28	28	5	7.9	BH	0.0685	BH	0.023	J	7/25/08
IE09A /	1	1	WQ Surr	4	5.5	4	15.8	28	28	1	7.9					BH	7/26/08
IE09A /	2	1	WQ Surr	4	4.4	4	16.1	28	28	1	7.8					BH	7/27/08
IE09A /	3	1	WQ Surr	4	7.5	4	15.9	28	28	1	7.9					CR	7/28
IE09A /	4	1	WQ Surr														
IH01A /	0	73	WQ Surr	4	6.3	4	15.5	28	28	5	8.0	BH	0.0747	BH	0.049	J	7/25/08
IH01A /	1	73	WQ Surr	4	6.0	4	16.0	28	28	1	8.0					BH	7/26/08
IH01A /	2	73	WQ Surr	4	6.5	4	15.6	28	28	1	7.9					BH	7/27/08
IH01A /	3	73	WQ Surr	4	6.0	4	15.9	28	28	1	7.7					CR	7/28
IH01A /	4	73	WQ Surr														

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2215
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	mg/L (Total)		
IH02A /	0	23	WQ Surr	4	5.6	4	15.1	28	28	1	7.9	BH	0.0800	BH	0.026	A	7/25/08
IH02A /	1	23	WQ Surr	4	5.1	4	16.1	28	28	1	7.9			BH		BH	7/26/08
IH02A /	2	23	WQ Surr	4	5.9	4	16.0	28	28	1	7.8			BH		BH	7/27/08
IH02A /	3	23	WQ Surr	4	5.1	4	15.7	28	28	1	7.6			CR		CR	7/28
IH02A /	4	23	WQ Surr														
IH03A /	0	106	WQ Surr	4	5.7	4	15.4	28	28	1	7.9	BH	0.194	BH	0.030	A	7/25/08
IH03A /	1	106	WQ Surr	4	5.5	4	15.9	28	28	1	8.0			BH		BH	7/26/08
IH03A /	2	106	WQ Surr	4	4.4	4	15.6	28	28	1	7.9			BH		BH	7/27/08
IH03A /	3	106	WQ Surr	4	8.1	4	15.9	28	28	1	7.9			CR		CR	7/28
IH03A /	4	106	WQ Surr														
IH05A /	0	114	WQ Surr	4	6.1	4	15.3	28	28	1	7.9	BH	0.35	BH	0.024	A	7/25/08
IH05A /	1	114	WQ Surr	4	5.5	4	16.0	28	28	1	8.0			BH		BH	7/26/08
IH05A /	2	114	WQ Surr	4	5.9	4	15.3	28	28	1	7.9			BH		BH	7/27/08
IH05A /	3	114	WQ Surr	4	5.7	4	15.4	28	28	1	7.6			CR		CR	7/28
IH05A /	4	114	WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2215	TIME

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C) 16 ± 1	SALINITY ppt	pH	Ammonia		Sulfide		DATE	
				>4.8					mg/L (total)		ug/L (Total)			TECH
				meter	meter				Techn.	AMMONIA	Techn.	NA		
IH06A /	0	48	WQ Surr	4	6.1	15.2	28	8.0	0.277	0.027		7/25/08		
IH06A /	1	48	WQ Surr	4	5.0	16.2	28	8.0				7/26/08		
IH06A /	2	48	WQ Surr	4	6.1	15.5	28	7.9				7/27/08		
IH06A /	3	48	WQ Surr	4	5.1	15.5	28	7.6				7/28		
IH06A /	4	48	WQ Surr											
KP01A /	0	123	WQ Surr	4	5.6	15.5	28	7.6	0.305	0.017		7/25/08		
KP01A /	1	123	WQ Surr	4	5.1	15.6	28	8.0				7/26/08		
KP01A /	2	123	WQ Surr	4	5.8	15.5	28	7.9				7/27/08		
KP01A /	3	123	WQ Surr	4	5.4	15.4	28	7.6				7/28		
KP01A /	4	123	WQ Surr											
KP02A /	0	24	WQ Surr	4	6.9	16.0	28	8.0	0.284	0.017		7/25/08		
KP02A /	1	24	WQ Surr	4	5.9	16.2	28	8.1				7/26/08		
KP02A /	2	24	WQ Surr	4	5.8	15.7	28	7.9				7/27/08		
KP02A /	3	24	WQ Surr	4	4.7	15.7	28	7.7				7/28		
KP02A /	4	24	WQ Surr											

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2215	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L) >4.8		Temp (°C) 16 ± 1		SALINITY 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
				meter	ng/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
KP03A/	0	99	WQ Surr	4	6.4	4	15.3	1	28	1	7.9	BH	0.117	BH	0.014	✓	7/25/08
KP03A/	1	99	WQ Surr	4	6.0	4	15.9	1	28	1	8.0					BH	7/26/08
KP03A/	2	99	WQ Surr	4	6.1	4	15.5	1	28	1	7.9					BH	7/27/08
KP03A/	3	99	WQ Surr	4	5.6	4	15.1	1	28	1	7.6					CR	7/28
KP03A/	4	99	WQ Surr														
MA01A/	0	39	WQ Surr	4	6.0	4	15.0	1	28	1	8.0	BH	0.214	BH	0.029	✓	7/25/08
MA01A/	1	39	WQ Surr	4	5.0	4	16.1	1	28	1	8.0					BH	7/26/08
MA01A/	2	39	WQ Surr	4	5.4	4	15.5	1	28	1	7.9					BH	7/27/08
MA01A/	3	39	WQ Surr	4	4.8	4	15.3	1	28	1	7.7					CR	7/28
MA01A/	4	39	WQ Surr														
BL01A/	0	105	WQ Surr	4	7.2	4	15.9	1	28	5	7.9	BH	0.217	BH	0.019	✓	7/25/08
BL01A/	1	105	WQ Surr	4	7.2	4	16.1	1	28	1	8.0					BH	7/26/08
BL01A/	2	105	WQ Surr	4	6.6	4	15.6	1	28	1	7.9					BH	7/27/08
BL01A/	3	105	WQ Surr	4	5.9	4	15.5	1	28	1	7.7					CR	7/28
BL01A/	4	105	WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

① Test sample aerated prior to initiation and DO removed. Seals taken off air after init 7-29-08 BH
 ② WC 7-25-08 JW
 ③ Meter changed CR 7/28

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 25Jul08	TEST END DATE 2215
		TIME 2215	PROTOCOL PSEP (1995)

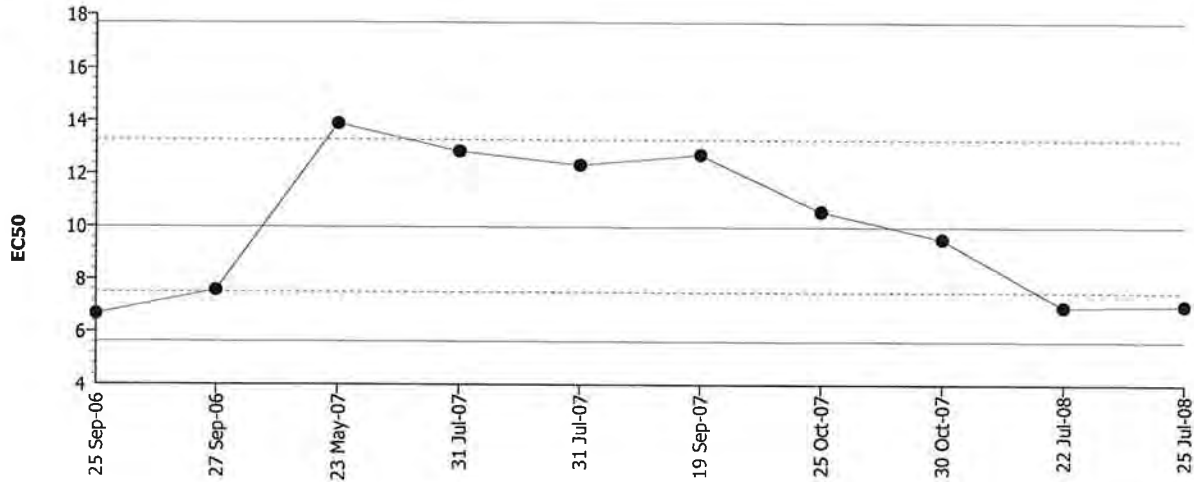
WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		Sal (ppt)		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
Eoh Control /	0		WQ Surr	4	7.0	4	16.1	1	28	1	7.9	BH	0.099	BH	0.009	BH	7/25/08
Eoh Control /	1		WQ Surr	4	6.8	4	15.8	1	28	1	7.9	BH		BH		BH	7/26/08
Eoh Control /	2		WQ Surr	4	6.8	4	15.5	1	28	1	7.7	BH		BH		BH	7/27/08
Eoh Control /	3		WQ Surr	4	7.1	4	15.7	1	28	1	7.9	CR		CR		CR	7/28
Eoh Control /	4		WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

Echinoid Embryo-Larval Survival and Development Test NewFields

Test Type: Development-Survival Organism: Dendroaster excentricus (Sand Dollar) Material: Copper sulfate
 Protocol: PSEP (1995) Endpoint: Proportion Normal Source: Reference Toxicant-REF



Mean: 9.98526 Count: 9 -1s Warning Limit: 7.49856 -2s Action Limit: 5.63114
 Sigma: CV: 33.16% +1s Warning Limit: 13.2966 +2s Action Limit: 17.7061

Quality Control Data										
Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Sep	25	6.66180	-3.32346	-1.41313	(-)		15-9124-4449	12-6731-0558
2			27	7.56297	-2.42229	-0.97013			12-0508-6315	07-3739-8798
3	2007	May	23	13.89896	3.91370	1.15469	(+)		01-4296-4787	05-7613-5311
4		Jul	31	12.85222	2.86696	0.88131			13-9151-2777	12-8049-9522
5			31	12.33174	2.34648	0.73696			02-7352-2736	12-1169-5876
6		Sep	19	12.73121	2.74595	0.84828			09-8513-0350	13-2299-3806
7		Oct	25	10.57427	0.58901	0.20012			12-7566-1317	15-3106-2890
8			30	9.52576	-0.45950	-0.16449			12-1647-2406	05-3030-1731
9	2008	Jul	22	6.93340	-3.05186	-1.27361	(-)		20-1766-4632	11-5915-4021
10			25	6.99766	-2.98760	-1.24139	(-)		10-7779-9263	09-2506-4650

CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Combined Proportion Normal	Comparison	10-7779-9263	10-7779-9263	23 Sep-08 10:36 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		2.5	5	40	3.53553	13.23%

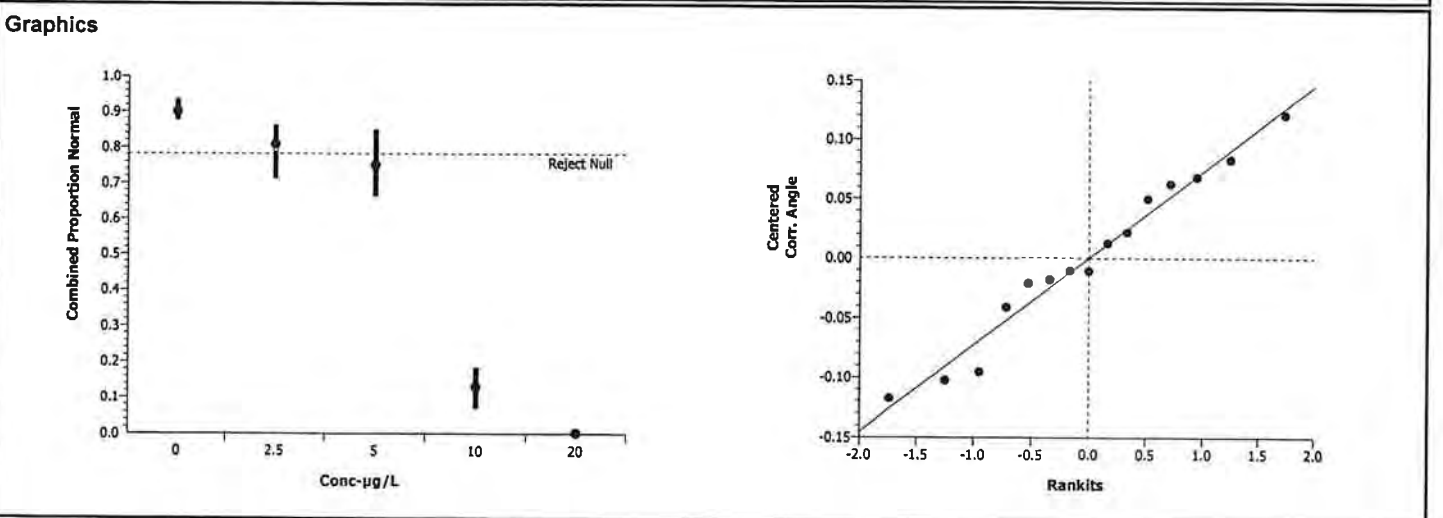
Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	1.88829	2.46559	0.1227	0.16798	Non-Significant Effect
		5	2.93061	2.46559	0.0235	0.16798	Significant Effect
		10	13.074	2.46559	0.0000	0.16798	Significant Effect
		20	17.7293	2.46559	0.0000	0.16798	Significant Effect

ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	3.392354	0.8480886	4	121.81	0.00000	Significant Effect
Error	0.0696232	0.0069623	10			
Total	3.46197765	0.8550509	14			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	4.36530	13.27670	0.35882	Equal Variances
Distribution	Shapiro-Wilk W	0.96448		0.76961	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	0.89986	0.87554	0.93562	0.03164	1.25157	1.21024	1.31426	0.05520
2.5		3	0.80830	0.71245	0.86266	0.08326	1.12292	1.00482	1.19115	0.10269
5		3	0.74964	0.66094	0.84979	0.09494	1.05191	0.94926	1.17280	0.11288
10		3	0.12876	0.06867	0.18455	0.05806	0.36085	0.26514	0.44404	0.09010
20		3	0.00143	0.00000	0.00429	0.00248	0.04369	0.03276	0.06556	0.01894

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	0.87554	0.88841	0.93562							
2.5		0.86266	0.71245	0.84979							
5		0.73820	0.66094	0.84979							
10		0.13305	0.06867	0.18455							
20		0.00000	0.00429	0.00000							



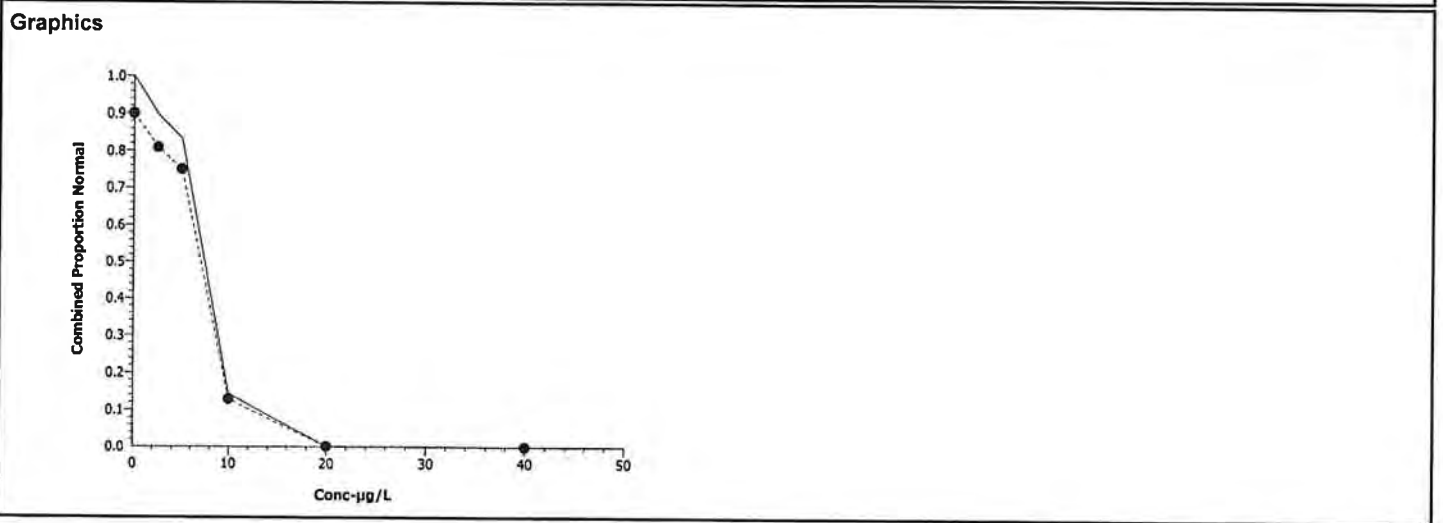
CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Combined Proportion Normal	Trimmed Spearman-Karber	10-7779-9263	10-7779-9263	23 Sep-08 10:37 AM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0.1001431	10.17%	0.8349429	0.006867366	6.83822	6.62534	7.05793

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.89986	0.87554	0.93562	0.00646	0.03164	629	699
2.5		3	0.80830	0.71245	0.86266	0.01700	0.08326	565	699
5		3	0.74964	0.66094	0.84979	0.01938	0.09494	524	699
10		3	0.12876	0.06867	0.18455	0.01185	0.05806	90	699
20		3	0.00143	0.00000	0.00429	0.00051	0.00248	1	699
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	699



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Normal	Comparison	10-7779-9263	10-7779-9263	23 Sep-08 10:37 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		2.5	5	40	3.53553	6.82%

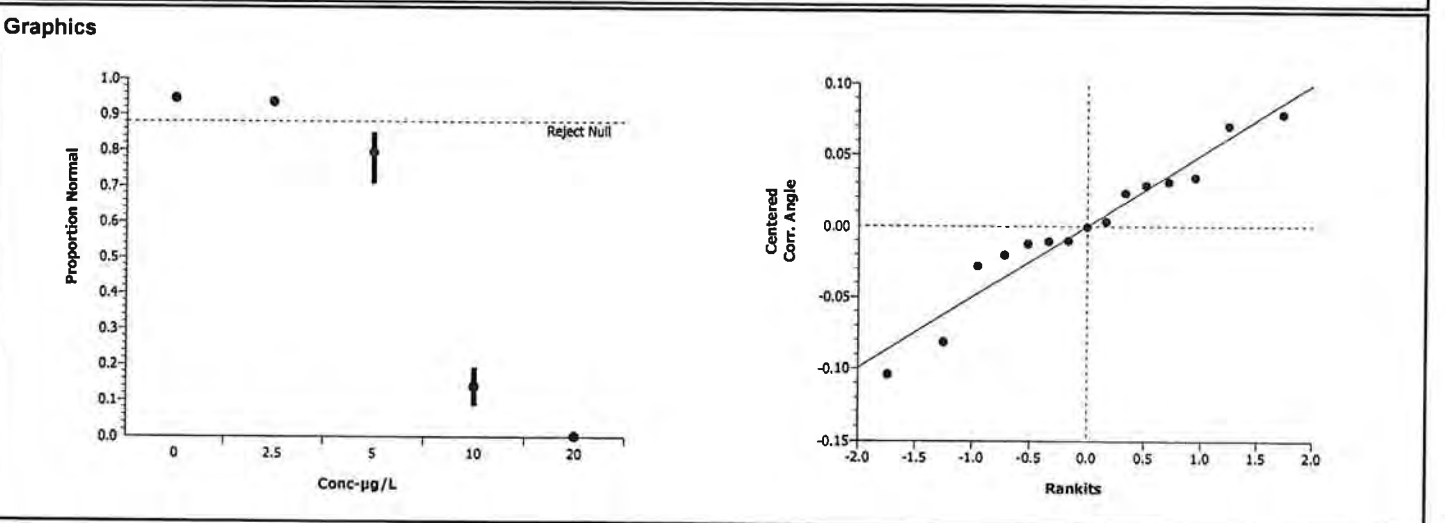
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.43940	2.46559	0.6323	0.11684	Non-Significant Effect
		5	4.89246	2.46559	0.0011	0.11684	Significant Effect
		10	20.2207	2.46559	0.0000	0.11684	Significant Effect
		20	27.2139	2.46559	0.0000	0.11684	Significant Effect

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	4.154673	1.038668	4	308.37	0.00000	Significant Effect
Error	0.0336825	0.0033683	10			
Total	4.1883556	1.0420365	14			

Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	5.88493	13.27670	0.20791	Equal Variances
Distribution	Shapiro-Wilk W	0.94643		0.47009	Normal Distribution

Conc-µg/L	Control Type	Count	Original Data				Transformed Data			
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.94468	0.93562	0.95833	0.01203	1.33434	1.31426	1.36523	0.02715
2.5		3	0.93480	0.92093	0.94857	0.01382	1.31352	1.28576	1.34203	0.02814
5		3	0.79306	0.70642	0.84979	0.07622	1.10250	0.99819	1.17280	0.09214
10		3	0.13807	0.08421	0.19283	0.05431	0.37615	0.29443	0.45462	0.08015
20		3	0.00153	0.00000	0.00459	0.00265	0.04476	0.03208	0.06778	0.01997

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	0.94009	0.95833	0.93562							
2.5		0.93488	0.94857	0.92093							
5		0.82297	0.70642	0.84979							
10		0.13717	0.08421	0.19283							
20		0.00000	0.00459	0.00000							



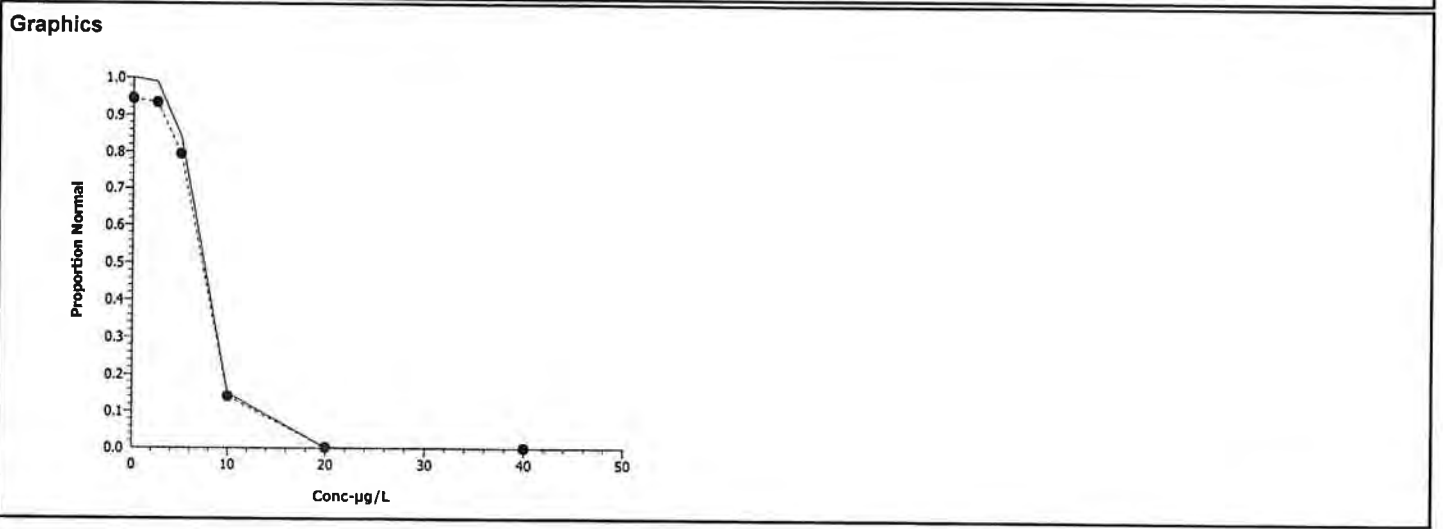
CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Normal	Trimmed Spearman-Karber	10-7779-9263	10-7779-9263	23 Sep-08 10:37 AM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0.05555556	1.12%	0.844953	0.006202239	6.99766	6.80062	7.20041

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.94468	0.93562	0.95833	0.00246	0.01203	629	666
2.5		3	0.93480	0.92093	0.94857	0.00282	0.01382	565	605
5		3	0.79306	0.70642	0.84979	0.01556	0.07622	524	660
10		3	0.13807	0.08421	0.19283	0.01109	0.05431	90	639
20		3	0.00153	0.00000	0.00459	0.00054	0.00265	1	672
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	651

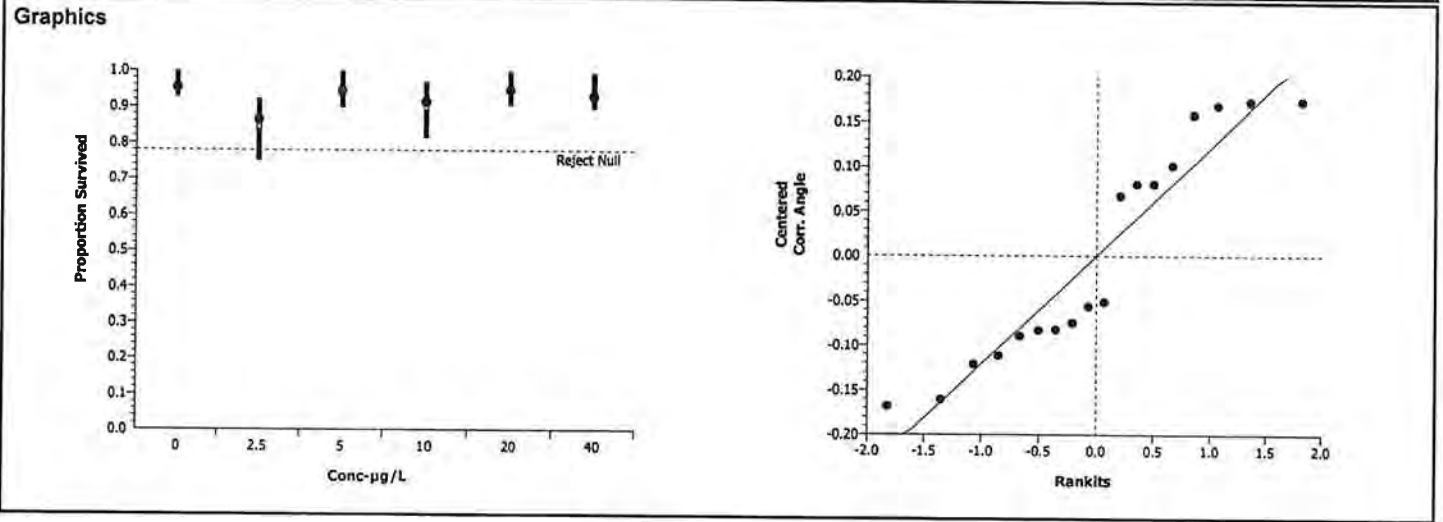


CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test								NewFields		
Endpoint	Analysis Type		Sample Link	Control Link	Date Analyzed	Version				
Proportion Survived	Comparison		10-7779-9263	10-7779-9263	23 Sep-08 10:38 AM	CETISv1.1.2				
Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD		
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		40	>40	2.5	N/A	18.11%		
Group Comparisons										
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)			
Dilution Water		2.5	1.44221	2.5023	0.2544	0.29742	Non-Significant Effect			
		5	0.12508	2.5023	0.7941	0.29742	Non-Significant Effect			
		10	0.71658	2.5023	0.5525	0.29742	Non-Significant Effect			
		20	0.08472	2.5023	0.8073	0.29742	Non-Significant Effect			
		40	0.39393	2.5023	0.6934	0.29742	Non-Significant Effect			
ANOVA Table										
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)				
Between	0.0635515	0.0127103	5	0.60	0.70139	Non-Significant Effect				
Error	0.2542859	0.0211905	12							
Total	0.31783737	0.0339008	17							
ANOVA Assumptions										
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)					
Variances	Bartlett	0.03242	15.08627	0.99999	Equal Variances					
Distribution	Shapiro-Wilk W	0.88221		0.02844	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	0.95279	0.92704	1.00000	0.04094	1.38032	1.29729	1.53803	0.13665
2.5		3	0.86552	0.75107	0.92275	0.09912	1.20891	1.04844	1.28914	0.13897
5		3	0.94421	0.89700	1.00000	0.05204	1.36546	1.24407	1.53803	0.15352
10		3	0.91416	0.81545	0.96996	0.08573	1.29515	1.12676	1.39659	0.14685
20		3	0.94707	0.90558	1.00000	0.04824	1.37025	1.25846	1.53803	0.14796
40		3	0.93133	0.89700	0.99571	0.05579	1.33350	1.24407	1.50524	0.14877

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	0.93133	0.92704	1.00000							
2.5		0.92275	0.75107	0.92275							
5		0.89700	0.93562	1.00000							
10		0.96996	0.81545	0.95708							
20		1.00000	0.93562	0.90558							
40		0.99571	0.89700	0.90129							



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test **NewFields**

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Interpolation	10-7779-9263	10-7779-9263	23 Sep-08 10:38 AM	CETISv1.1.2

Linear Interpolation Options

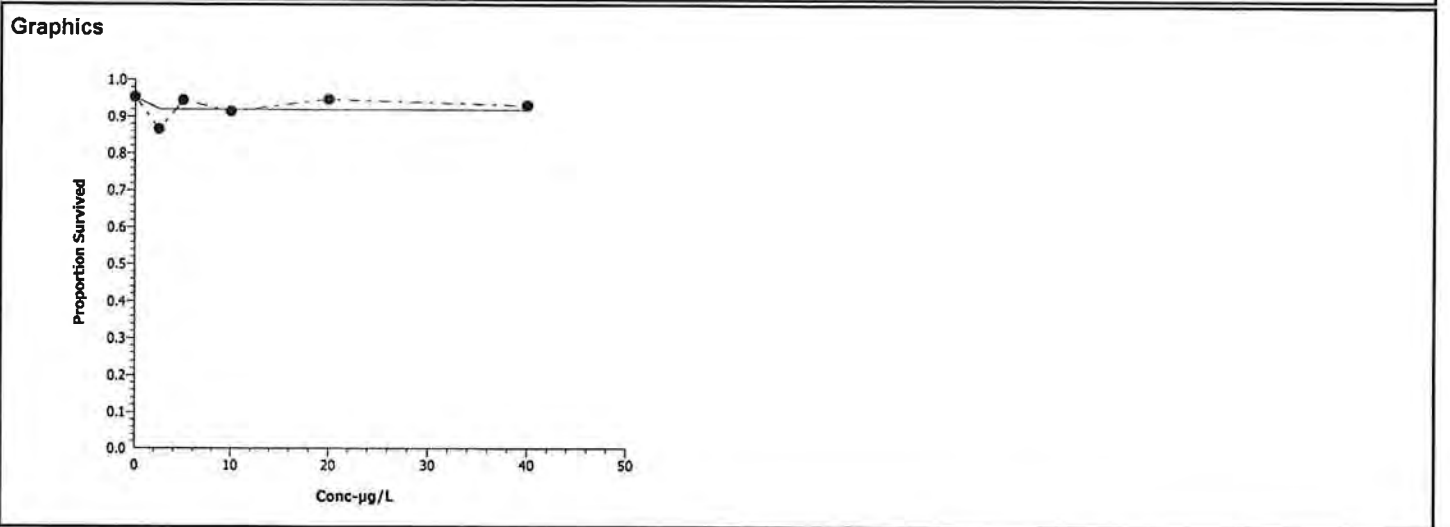
X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Log(X + 1)	Linear	57951	200	Yes	Two-Point Interpolation

Point Estimates

% Effect	Conc-µg/L	95% LCL	95% UCL
5	> 40	N/A	N/A
10	> 40	N/A	N/A
15	> 40	N/A	N/A
20	> 40	N/A	N/A
25	> 40	N/A	N/A
40	> 40	N/A	N/A
50	> 40	N/A	N/A

Data Summary

Conc-µg/L	Control Type	Count	Calculated Variate(A/B)						
			Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.95279	0.92704	1.00000	0.00836	0.04094	666	699
2.5		3	0.86552	0.75107	0.92275	0.02023	0.09912	605	699
5		3	0.94421	0.89700	1.00000	0.01062	0.05204	660	699
10		3	0.91416	0.81545	0.96996	0.01750	0.08573	639	699
20		3	0.94707	0.90558	1.00000	0.00985	0.04824	662	699
40		3	0.93133	0.89700	0.99571	0.01139	0.05579	651	699



Conc- μ g/L	Code	Rep	Pos.	Initial Density	Final Density	# Counted	# Normal
0	D	1	8	233	217	217	204
0	D	2	17	233	216	216	207
0	D	3	2	233	233	233	218
2.5		1	1	233	215	215	201
2.5		2	3	233	175	175	166
2.5		3	15	233	215	215	198
5		1	6	233	209	209	172
5		2	14	233	218	218	154
5		3	10	233	233	233	198
10		1	18	233	226	226	31
10		2	4	233	190	190	16
10		3	5	233	223	223	43
20		1	11	233	243	243	0
20		2	12	233	218	218	1
20		3	7	233	211	211	0
40		1	16	233	232	232	0
40		2	9	233	209	209	0
40		3	13	233	210	210	0



BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	QUANTITY OF TOXICANT: 0.039 mL	QUANTITY OF DILUENT: 500mL	INIT B
TEST ID 9070930.08	LOT #: 1704237	TEST START DATE 7/25/08	ACTUAL: 500.04	TIME 1500
		TEST END DATE 7/28/08	TIME 2230	

WATER QUALITY DATA

DILTN.WAT.BATCH	TEMP REC#	REFERENCE TOX. MATERIAL				REFERENCE TOXICANT						
		Copper Sulfate				Copper						
0		DO (mg/L)	TEMP(C)	SAL (ppt)	pH	meter	meter	meter	meter	TECH	DATE	
		>4.8	15 ± 1	28 ± 1	7.8 ± 0.5							
TEST CONDITIONS												
CLIENT/NEWFIELDS ID	CONCENTRATION		DAY	REP	DO (mg/L)	TEMP. °C	SALINITY		pH	meter <th rowspan="2">unit <th rowspan="2">DATE</th> </th>	unit <th rowspan="2">DATE</th>	DATE
	value	units					meter	ppt				
Ref.Tox.-Copper	0	µg/L	0	Stock	4	15.2	1	28	7.8	1	meter	BH 7/25/08
Ref.Tox.-Copper	2.5	µg/L	3	Stock	4	16.1	1	28	7.5	1	meter	CR 7/28
Ref.Tox.-Copper	5	µg/L	0	Stock	4	15.7	1	28	7.8	1	meter	BH 7/25/08
Ref.Tox.-Copper	10	µg/L	3	Stock	4	15.8	1	28	7.7	1	meter	CR 7/28
Ref.Tox.-Copper	20	µg/L	0	Stock	4	15.6	1	28	7.9	1	meter	BH 7/25/08
Ref.Tox.-Copper	40	µg/L	3	Stock	4	15.7	1	28	7.8	1	meter	CR 7/28
			0	Stock	4	15.5	1	28	7.9	1	meter	BH 7/25/08
			3	Stock	4	15.7	1	28	7.8	1	meter	CR 7/28
			0	Stock	4	15.5	1	28	7.9	1	meter	BH 7/25/08
			3	Stock	4	15.7	1	28	7.8	1	meter	CR 7/28
			0	Stock	4	15.5	1	28	7.9	1	meter	BH 7/25/08
			3	Stock	4	15.7	1	28	7.8	1	meter	CR 7/28
			0	Stock	4	15.3	1	28	7.9	1	meter	BH 7/25/08
			3	Stock	4	15.5	1	29	7.8	1	meter	CR 7/28

OWC CR 7/28/08

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST DATA SHEET 1



SPECIES <i>Dendraster excentricus</i>		
CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner		NEWFIELDS LAB / LOCATION Port Gamble / Incubator
PROTOCOL PSEP (1995)		

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	204	13	9/17/08	LR	
				2	207	9			
				3	218	15			
Ref.Tox. - Copper	2.5	µg/L		1	201	14			
				2	166	9			
				3	198	17			
Ref.Tox. - Copper	5	µg/L		1	172	37			
				2	154	64			
				3	198	35			
Ref.Tox. - Copper	10	µg/L		1	31	195			
				2	16	164			
				3	43	180			
Ref.Tox. - Copper	20	µg/L		1	0	243			
				2	1	217			
				3	0	211			
Ref.Tox. - Copper	40	µg/L		1	0	232			
				2	0	209			
				3	0	210			↓
STOCKING DENSITY				1	NA	236	7/25/08	DM	
				2	↓	216	↓		
				3	↓	247	↓		



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
STOCKING DENSITY	1	NA	23 / 286	9/4/08	BH	
	2		242 / 278	9/6/08		
	3		212 / 264			
	4		266 / 296			
	5		311 / 269			
Control /	1	212 / 243	2 / 1			
	2	235 / 233	2 / 5			
	3	257 / 245	6 / 2			
	4	245 / 272	2 / 10			
	5	236 / 291	2 / 4			
RF01A /	6	231 / 224	1 / 2			
	2	243 / 223	0 / 1			
	3	253 / 225	1 / 2			
	4	248 / 228	0 / 4			
	5	241 / 172	0 / 4			
RF02A /	11	214 / 220	2 / 2			
	2	289 / 254	1 / 4			
	3	233 / 194	0 / 3			
	4	215 / 215	1 / 3			
	5	262 / 239	3 / 5			
RF03A /	16	240 / 194	6 / 3			
	2	205 / 111	5 / 16			
	3	229 / 144	6 / 13			
	4	179 / 188	9 / 7			
	5	190 / 217	1 / 3			

BIVALV ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES <i>Dendraster excentricus</i>
CLIENT Ecology & Environment
PROJECT Port Angeles
JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner
NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
21 CO02A /	1	307 244	5 4	9/4/08	BH	
	2	250 203	2 6			
	3	241 56	2 36			
	4	245 217	2 3			
	5	237 135	1 25			
26 DO03A /	1	187 254	4 2			
	2	158 208	5 3			
	3	183 209	5 3			
	4	159 222	1 1			
	5	431 141	1 16			
31 DO04A /	1	249 238	4 3			
	2	260 203	3 4			
	3	236 265	2 0			
	4	236 231	0 1			
	5	245 233	3 6			
36 DO05A /	1	261 218	4 4			
	2	282 271	5 3			
	3	235 243	6 3			
	4	274 243	7 1			
	5	249 265	3 4			
41 EC04A /	1	241 206	0 1			
	2	493 207	1 2			
	3	207 249	4 3			
	4	209 217	2 2			
	5	492 201	2 3			

BIVALV ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
46 ED03A /	1	246 24	0 0	9/7/06	BH	
	2	244 119	4 24			
	3	288 213	0 1			
	4	244 233	4 4			
	5	215 203	0 1			
51 ED04A /	1	209 35	2 26			
	2	214 29	4 26			
	3	252 55	3 12			
	4	187 57	5 8			
	5	210 99	2 5			
56 ED05A /	1	216 192	0 3			
	2	302 212	3 1			
	3	191 213	3 0			
	4	224 220	5 8			
	5	206 152	3 3			
4 MD01A /	1	86 205	1 5			
	2	119 160	2 3			
	3	40 205	4 2			
	4	53 220	2 0			
	5	52 181	2 1			
66 MD02A /	1	262 193	4 10			
	2	234 180	4 9			
	3	262 67	3 81			
	4	234 13	4 33			
	5	239 13	4 56			

BIVALV ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
71 MD03A /	1	147	31	9/8/08	J	
	2	109	23			
	3	80	35			
	4	207	9			
	5	73	47			
76 WW01A /	1	206	0			
	2	237	2			
	3	183	0			
	4	229	1			
	5	228	1			
81 Sediment Control /	1	238	3			
	2	260	1			
	3	246	2			
	4	210	4			
	5	220	0			
1	1					
	2					
	3					
	4					
	5					
1	1					
	2					
	3					
	4					
	5					



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E E E Port Angeles	Organism: Larval Batch #3	NewFields Test ID:	Test Duration (days):
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~~UV treated~~
 PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 7/31/08
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:	
7/31/08	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
H ₂ O \emptyset	Surr	7/31/08 TS	<0.5	19	7/31/08 TS	N	NA \rightarrow 7		\emptyset
Sed \emptyset			<0.5						0.002
RF01			<0.5						0.005
RF02			<0.5						0.017
RF03			<0.5						0.159
C002			<0.5						0.076
D003			<0.5						0.103
D004			<0.5						0.162
D005			<0.5						0.157
EC04			<0.5						0.104
ED03			at 1.74 ^{<0.5}						0.130
ED04			at 1.74 ^{<0.5}						0.186
ED05			<0.5						0.098
MDO1			<0.5						0.119
MDO2			<0.5						0.151
MDO3	↓	↓	<0.5	↓	↓	↓	↓	↓	0.106

DIE 7/31/08

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
WW01	5uvr	7/31/08 TS	< 0.5	19	7/31/08 TS	N	NA →		0.179

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE 8/03/08
		TIME 1730	TIME 1700

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				>4.8		15 ± 1		28 ± 1		7.8 ± 0.5		NA		NA			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
Control /	0	81	WQ Surr	4	8.1	4	14.8	1	28	1	7.9						7/31/08
Control /	1	81	WQ Surr	4	7.8	4	14.5	1	28	1	7.9						8/1/08
Control /	2	81	WQ Surr	4	7.2	4	15.3	1	28	1	7.6						8/2
Control /	3	81	WQ Surr	4	7.0	4	15.2	1	28	1	7.7						8/3
Control /	4	81	WQ Surr														
RF01A /	0	4	WQ Surr	4	8.2	4	14.9	1	28	1	7.7						7/31/08
RF01A /	1	4	WQ Surr	4	7.5	4	14.9	1	28	1	7.7						8/1/08
RF01A /	2	4	WQ Surr	4	6.5	4	15.5	1	28	1	7.7						8/2
RF01A /	3	4	WQ Surr	4	6.8	4	15.0	1	28	1	7.8						8/3
RF01A /	4	4	WQ Surr														
RF02A /	0	23	WQ Surr	4	7.9	4	14.5	1	28	1	7.9						7/31/08
RF02A /	1	23	WQ Surr	4	7.2	4	14.7	1	28	1	7.9						8/1/08
RF02A /	2	23	WQ Surr	4	6.8	4	15.1	1	28	1	7.7						8/2
RF02A /	3	23	WQ Surr	4	6.8	4	14.7	1	28	1	7.7						8/3
RF02A /	4	23	WQ Surr														

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Dendroaster excentricus	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE TIME
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia NA		Sulfide NA		DATE
				>4.0		15 ± 1		28 ± 1		7.8 ± 0.5		NA		NA		
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)	
RF03A /	0	90	WQ Surr	4	7.6	4	14.7	1	28	1	7.9					J 7/3/08
RF03A /	1	90	WQ Surr	4	7.6	4	14.5	1	28	1	7.9					CR 8/1/08
RF03A /	2	90	WQ Surr	4	6.5	4	15.2	1	28	1	7.5					B 8/2
RF03A /	3	90	WQ Surr	4	5.5	4	15.0	1	28	1	7.6					B 8/3
RF03A /	4	90	WQ Surr													
CO02A /	0	31	WQ Surr	4	7.4	4	15.1	1	28	1	7.9					J 7/3/08
CO02A /	1	31	WQ Surr	4	7.6	4	14.8	1	28	1	7.9					CR 8/1/08
CO02A /	2	31	WQ Surr	4	5.0	4	15.3	1	28	1	7.6					B 8/2
CO02A /	3	31	WQ Surr	4	4.8	4	14.7	1	28	1	7.6					B 8/3
CO02A /	4	31	WQ Surr													
DO03A /	0	63	WQ Surr	4	7.9	4	14.6	1	28	1	7.9					J 7/3/08
DO03A /	1	63	WQ Surr	4	6.6	4	14.5	1	28	1	7.9					CR 8/1/08
DO03A /	2	63	WQ Surr	4	6.4	4	14.9	1	28	1	7.4					B 8/2
DO03A /	3	63	WQ Surr	4	6.4	4	14.6	1	28	1	7.7					B 8/3
DO03A /	4	63	WQ Surr													

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE TIME
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	TEST CONDITIONS DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia NA		Sulfide NA		DATE
				meter	>4.8	meter	15 ± 1	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)	
DO04A/	0	93	WQ Surr	4	7.8	4	14.9	28	28	7.9						7/3/08
DO04A/	1	93	WQ Surr	4	6.6	4	14.5	28	28	7.9						8/1/08
DO04A/	2	93	WQ Surr	4	6.4	4	15.0	28	28	7.4						8/2
DO04A/	3	93	WQ Surr	4	6.0	4	15.3	28	28	7.7						8/3
DO04A/	4	93	WQ Surr													
DO05A/	0	9	WQ Surr	4	7.4	4	15.1	28	28	7.8						7/3/08
DO05A/	1	9	WQ Surr	4	7.1	4	14.9	28	28	7.8						8/1/08
DO05A/	2	9	WQ Surr	4	7.0	4	15.6	28	28	7.7						8/2
DO05A/	3	9	WQ Surr	4	6.6	4	15.1	28	28	7.7						8/3
DO05A/	4	9	WQ Surr													
EC04A/	0	6	WQ Surr	4	7.4	4	14.7	28	28	7.8						7/3/08
EC04A/	1	6	WQ Surr	4	5.7	4	14.8	28	28	7.7						8/1/08
EC04A/	2	6	WQ Surr	4	6.5	4	15.5	28	28	7.7						8/2
EC04A/	3	6	WQ Surr	4	6.3	4	14.9	28	28	7.7						8/3
EC04A/	4	6	WQ Surr													

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES Dendroaster excentricus	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE TIME
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	mg/L (total)	Techn.	ug/L (total)	Techn.	
ED03A/	0	52	WQ Surr	4	6.9	4	14.9	1	28	1	7.9					7/3/08
ED03A/	1	52	WQ Surr	4	7.5	4	14.4	1	28	1	7.9					8/1/08
ED03A/	2	52	WQ Surr	4	6.7	4	15.2	1	28	1	7.6					8/2
ED03A/	3	52	WQ Surr	4	5.9	4	14.6	1	28	1	7.7					8/3
ED03A/	4	52	WQ Surr													
ED04A/	0	43	WQ Surr	4	5.2	4	15.0	1	28	1	7.9					7/3/08
ED04A/	1	43	WQ Surr	4	3.8	4	14.7	1	28	1	7.8					8/1/08
ED04A/	2	43	WQ Surr	4	7.4	4	15.8	1	28	1	7.8					8/2
ED04A/	3	43	WQ Surr	4	7.6	4	15.2	1	28	1	7.9					8/3
ED04A/	4	43	WQ Surr													
ED05A/	0	42	WQ Surr	4	7.3	4	15.2	1	28	1	7.8					7/3/08
ED05A/	1	42	WQ Surr	4	6.2	4	14.6	1	28	1	7.8					8/1/08
ED05A/	2	42	WQ Surr	4	6.2	4	15.3	1	28	1	7.7					8/2
ED05A/	3	42	WQ Surr	4	5.8	4	14.7	1	28	1	7.7					8/3
ED05A/	4	42	WQ Surr													

* Day 3 observations needed only if development endpoint not met by day 2

D12 7/3/08 ✓
 @ Placed under aeration 8:00 PM

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE
		TIME	TIME
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	CONDITIONS		DO (mg/L) >4.8	Temp (°C) 15 ± 1	Sal (ppt) 28 ± 1	pH 7.8 ± 0.5	Ammonia NA	Sulfide NA	DATE											
	DAY	Random #								REP	TEMP.		SALINITY		pH		AMMONIA		SULFIDE	
											meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)
MD01A /	0	40	4	15.1	28	7.8			7/31/08											
MD01A /	1	40	4	14.5	28	7.8			8/1/08											
MD01A /	2	40	4	15.1	28	7.6			8/2											
MD01A /	3	40	4	14.9	28	7.6			8/3											
MD01A /	4	40																		
MD02A /	0	72	4	15.0	28	7.9			7/31/08											
MD02A /	1	72	4	15.0	28	7.8			8/1/08											
MD02A /	2	72	4	15.0	28	7.5			8/2											
MD02A /	3	72	4	15.0	28	7.6			8/3											
MD02A /	4	72																		
MD03A /	0	35	4	14.7	28	7.9			7/31/08											
MD03A /	1	35	4	14.9	28	7.9			8/1/08											
MD03A /	2	35	4	14.8	28	7.6			8/2											
MD03A /	3	35	4	14.9	28	7.6			8/3											
MD03A /	4	35																		

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31 Jul 08	TEST END DATE TIME
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	NA	AMMONIA	NA	SULFIDE		
WW01A /	0	8	WQ SUIT	4	7.6	4	14.5	28	28	1	7.8					J	7/31/08
WW01A /	1	8	WQ SUIT	4	7.4	4	14.6	28	28	1	7.9					K	8/1/08
WW01A /	2	8	WQ SUIT	4	6.8	4	15.5	28	28	1	7.7					TS	8/2
WW01A /	3	8	WQ SUIT	4	6.7	4	14.8	28	28	1	7.7					TS	8/3
WW01A /	4	8	WQ SUIT														

Q12 7/31/08 J

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31 Jul 08	TEST END DATE	TIME

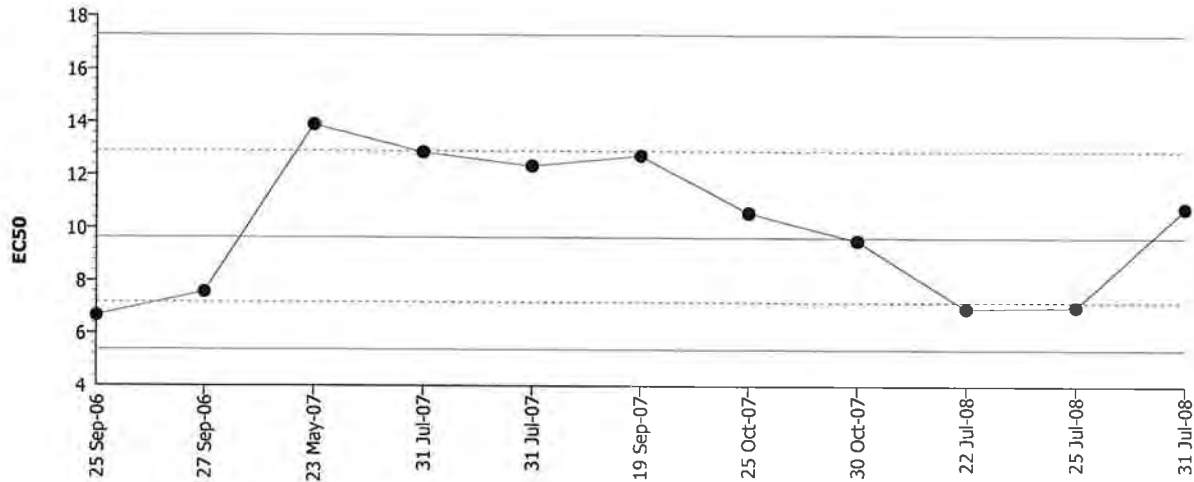
* Day 3 observations needed only if development endpoint not met by day 2

CLIENT/NEWFIELDS ID	DAY	Random #	REP	WATER QUALITY DATA										TECH	DATE		
				DO (mg/L)	Temp (°C)	Sal (ppt)	pH	Ammonia	Sulfide	D.O.	TEMP.	SALINITY	pH			AMMONIA	SULFIDE
				meter	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter
Sediment Control /	0		WQ SUIT	4	7.6	4	14.8	1	28	1	7.7						7/31/08
Sediment Control /	1		WQ SUIT	4	6.8	4	14.3	1	28	1	7.9						8/1/08
Sediment Control /	2		WQ SUIT	4	7.1	4	15.4	1	28	1	7.7						8/2
Sediment Control /	3		WQ SUIT	4	7.1	4	14.5	1	28	1	7.8						8/3
Sediment Control /	4		WQ SUIT														

CETIS QC Chart

Echinoid Embryo-Larval Survival and Development Test NewFields

Test Type: Development-Survival **Organism:** Dendraster excentricus (Sand Dollar) **Material:** Copper sulfate
Protocol: PSEP (1995) **Endpoint:** Proportion Normal **Source:** Reference Toxicant-REF



Mean: 9.63649 **Count:** 10 **-1s Warning Limit:** 7.19269 **-2s Action Limit:** 5.36864
Sigma: **CV:** 33.98% **+1s Warning Limit:** 12.9106 **+2s Action Limit:** 17.2971

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Sep	25	6.66180	-2.97469	-1.26215	(-)		15-9124-4449	12-6731-0558
2			27	7.56297	-2.07352	-0.82838			12-0508-6315	07-3739-8798
3	2007	May	23	13.89896	4.26247	1.25220	(+)		01-4296-4787	05-7613-5311
4		Jul	31	12.85222	3.21573	0.98451			13-9151-2777	12-8049-9522
5			31	12.33174	2.69525	0.84317			02-7352-2736	12-1169-5876
6		Sep	19	12.73121	3.09472	0.95216			09-8513-0350	13-2299-3806
7		Oct	25	10.57427	0.93778	0.31750			12-7566-1317	15-3106-2890
8			30	9.52576	-0.11073	-0.03951			12-1647-2406	05-3030-1731
9	2008	Jul	22	6.93340	-2.70309	-1.12553	(-)		20-1766-4632	11-5915-4021
10			25	6.99766	-2.63882	-1.09398	(-)		10-7779-9263	09-2506-4650
11			31	10.75282	1.11633	0.37475			21-0046-3420	08-3277-4745

CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Combined Proportion Normal	Comparison	21-0046-3420	21-0046-3420	23 Sep-08 11:04 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	19.14%

Group Comparisons							
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.10384	2.46559	0.7650	0.2775	Non-Significant Effect
		5	1.10312	2.46559	0.3467	0.2775	Non-Significant Effect
		10	4.07385	2.46559	0.0037	0.2775	Significant Effect
		20	9.81092	2.46559	0.0000	0.2775	Significant Effect

ANOVA Table						
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	2.604102	0.6510256	4	34.26	0.00001	Significant Effect
Error	0.1900084	0.0190008	10			
Total	2.79411079	0.6700264	14			

ANOVA Assumptions					
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	7.27278	13.27670	0.12216	Equal Variances
Distribution	Shapiro-Wilk W	0.94335		0.42638	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	0.90758	0.78636	0.99545	0.10846	1.30630	1.09031	1.50333	0.20716	
2.5		3	0.91667	0.86818	0.98182	0.05862	1.29461	1.19924	1.43554	0.12457	
5		3	0.84091	0.69091	0.95000	0.13430	1.18214	0.98128	1.34528	0.18491	
10		3	0.56212	0.52273	0.59545	0.03674	0.84779	0.80813	0.88144	0.03702	
20		3	0.04091	0.02727	0.05000	0.01203	0.20209	0.16590	0.22551	0.03179	

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	0.94091	0.99545	0.78636							
2.5		0.90000	0.98182	0.86818							
5		0.88182	0.95000	0.69091							
10		0.52273	0.59545	0.56818							
20		0.04545	0.02727	0.05000							

CETIS Analysis Detail

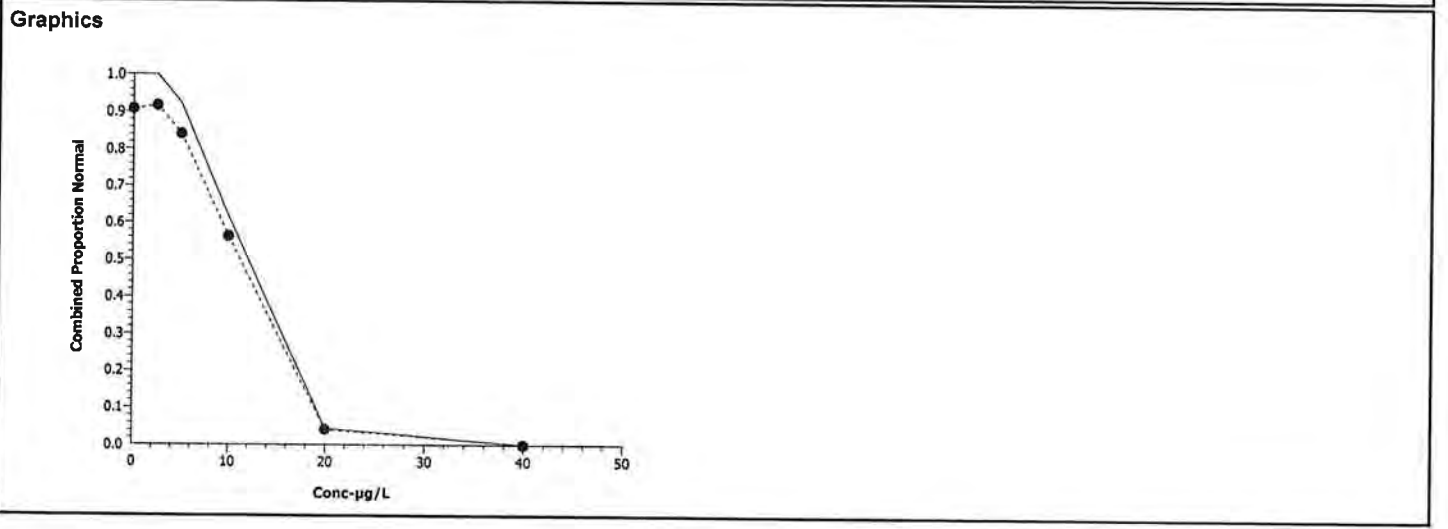
Spearman-Karber: Page 1 of 1
 Report Date: 23 Sep-08 11:04 AM
 Analysis: 02-8271-0933

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Combined Proportion Normal	Trimmed Spearman-Karber	21-0046-3420	21-0046-3420	23 Sep-08 11:04 AM	CETISv1.1.2

Spearman-Karber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0.09242424	0.00%	1.025002	0.006945033	10.59260	10.25917	10.93686

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.90758	0.78636	0.99545	0.02214	0.10846	599	660
2.5		3	0.91667	0.86818	0.98182	0.01197	0.05862	605	660
5		3	0.84091	0.69091	0.95000	0.02741	0.13430	555	660
10		3	0.56212	0.52273	0.59545	0.00750	0.03674	371	660
20		3	0.04091	0.02727	0.05000	0.00245	0.01203	27	660
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	660



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Normal	Comparison	21-0046-3420	21-0046-3420	23 Sep-08 11:04 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		2.5	5	40	3.53553	3.39%

Group Comparisons

Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	2.43037	2.46559	0.0529	0.08542	Non-Significant Effect
		5	3.36975	2.46559	0.0115	0.08542	Significant Effect
		10	16.2331	2.46559	0.0000	0.08542	Significant Effect
		20	34.5106	2.46559	0.0000	0.08542	Significant Effect

ANOVA Table

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	2.996779	0.7491948	4	416.16	0.00000	Significant Effect
Error	0.0180027	0.0018003	10			
Total	3.01478185	0.7509951	14			

ANOVA Assumptions

Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	2.71027	13.27670	0.60742	Equal Variances
Distribution	Shapiro-Wilk W	0.96634		0.80057	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	0.97122	0.95055	0.98206	0.01791	1.40523	1.34655	1.43646	0.05085
2.5		3	0.93705	0.91827	0.96585	0.02532	1.32103	1.28087	1.38494	0.05595
5		3	0.92171	0.89941	0.93304	0.01932	1.28849	1.24806	1.30904	0.03501
10		3	0.55732	0.54113	0.56710	0.01412	0.84286	0.82657	0.85270	0.01421
20		3	0.04444	0.02844	0.06369	0.01785	0.20966	0.16944	0.25514	0.04309

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	0.98104	0.98206	0.95055							
2.5		0.96585	0.92704	0.91827							
5		0.93269	0.93304	0.89941							
10		0.56373	0.56710	0.54113							
20		0.06369	0.02844	0.04120							

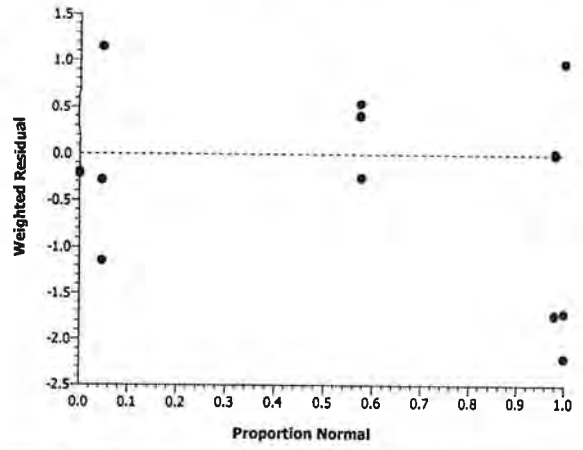
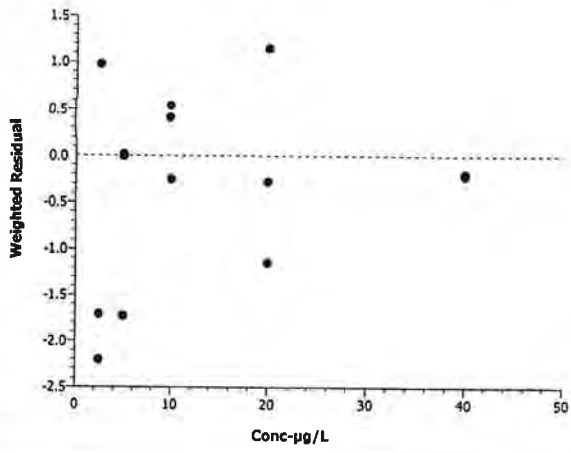
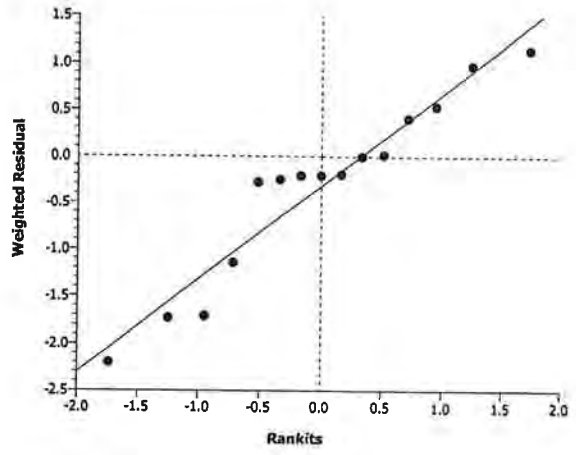
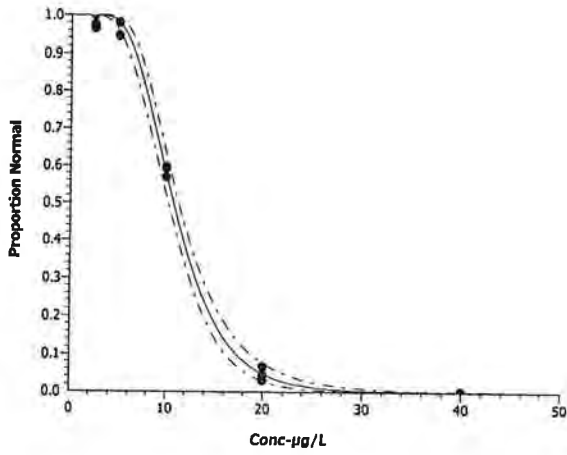
CETIS Analysis Detail

Linear Regression: Page 1 of 2
 Report Date: 23 Sep-08 11:05 AM
 Analysis: 08-3277-4745

Echinoid Embryo-Larval Survival and Development Test						NewFields			
Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version				
Proportion Normal	Linear Regression	21-0046-3420	21-0046-3420	23 Sep-08 11:05 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	0.0275974	Yes	Yes	No	No			
Regression Summary									
Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)	
11	-781.18210	-0.22667	0.16097	0.00903	15.09124	22.36203	0.30169	Non-Significant Heterogeneity	
Point Estimates									
% Effect	Conc-µg/L	95% LCL	95% UCL						
10	6.686998	6.237137	7.094254						
15	7.32298	6.886211	7.718703						
20	7.871306	7.447607	8.256528						
25	8.374328	7.96319	8.750319						
40	9.789066	9.408484	10.14869						
50	10.75282	10.38063	11.11762						
Regression Parameters									
Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)		
Threshold	0.04877174	0.005548531	0.03789661	0.05964686	8.790	0.00000	Significant		
Slope	6.212338	0.3012419	5.621904	6.802772	20.622	0.00000	Significant		
Intercept	-1.408167	0.3118365	-2.019366	-0.7969671	-4.516	0.00058	Significant		
Residual Analysis									
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)				
Variances	Bartlett	16.94444	9.48773	0.00198	Unequal Variances				
Distribution	Shapiro-Wilk W	0.925596		0.23428	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	0.97122	0.95055	0.98206	0.00366	0.01791	599	616
2.5		3	0.93705	0.91827	0.96585	0.00517	0.02532	605	646
5		3	0.92171	0.89941	0.93304	0.00394	0.01932	555	601
10		3	0.55732	0.54113	0.56710	0.00288	0.01412	371	666
20		3	0.04444	0.02844	0.06369	0.00364	0.01785	27	635
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	690

CETIS Analysis Detail

Graphics



CETIS Analysis Detail

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	21-0046-3420	21-0046-3420	23 Sep-08 11:05 AM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		40	>40	2.5	N/A	27.80%

Group Comparisons

Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	-0.2836	2.5023	0.9027	0.38931	Non-Significant Effect
		5	0.22666	2.5023	0.7585	0.38931	Non-Significant Effect
		10	-0.6974	2.5023	0.9611	0.38931	Non-Significant Effect
		20	0.2915	2.5023	0.7342	0.38931	Non-Significant Effect
		40	-0.7563	2.5023	0.9662	0.38931	Non-Significant Effect

ANOVA Table

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	0.0746071	0.0149214	5	0.41	0.83224	Non-Significant Effect
Error	0.4356879	0.0363073	12			
Total	0.51029498	0.0512287	17			

ANOVA Assumptions

Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	1.94102	15.08627	0.85725	Equal Variances
Distribution	Shapiro-Wilk W	0.94947		0.41672	Normal Distribution

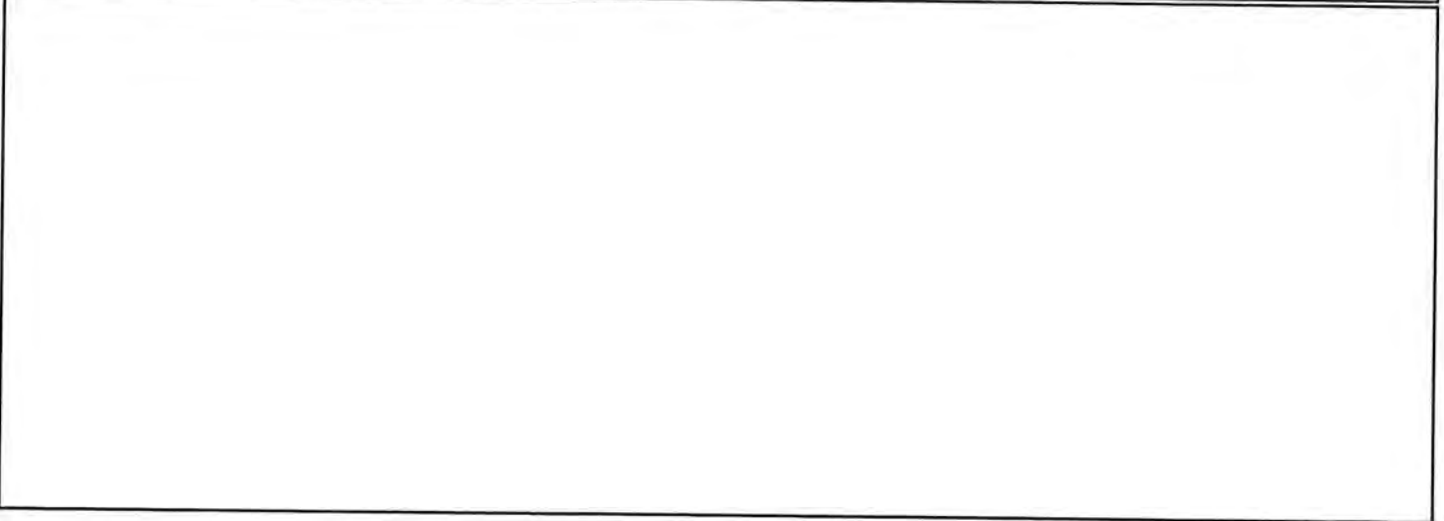
Data Summary

Conc-µg/L	Control Type	Count	Original Data				Transformed Data			
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.92879	0.82727	1.00000	0.09026	1.34880	1.14219	1.53708	0.19808
2.5		3	0.95909	0.93182	1.00000	0.03608	1.39292	1.30662	1.53708	0.12565
5		3	0.90455	0.76818	1.00000	0.12120	1.31354	1.06846	1.53708	0.23505
10		3	0.97576	0.92727	1.00000	0.04199	1.45730	1.29774	1.53708	0.13819
20		3	0.89091	0.71364	1.00000	0.15488	1.30345	1.00614	1.53708	0.27114
40		3	0.98030	0.94091	1.00000	0.03412	1.46647	1.32525	1.53708	0.12230

CETIS Analysis Detail

Comparisons: Page 2 of 2
Report Date: 23 Sep-08 11:05 AM
Analysis: 04-1462-6244

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	0.95909	1.00000	0.82727							
2.5		0.93182	1.00000	0.94545							
5		0.94545	1.00000	0.76818							
10		0.92727	1.00000	1.00000							
20		0.71364	0.95909	1.00000							
40		0.94091	1.00000	1.00000							



CETIS Analysis Detail

Linear Interpolation: Page 1 of 1
 Report Date: 23 Sep-08 11:05 AM
 Analysis: 15-1512-9096

Echinoid Embryo-Larval Survival and Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Interpolation	21-0046-3420	21-0046-3420	23 Sep-08 11:05 AM	CETISv1.1.2

Linear Interpolation Options

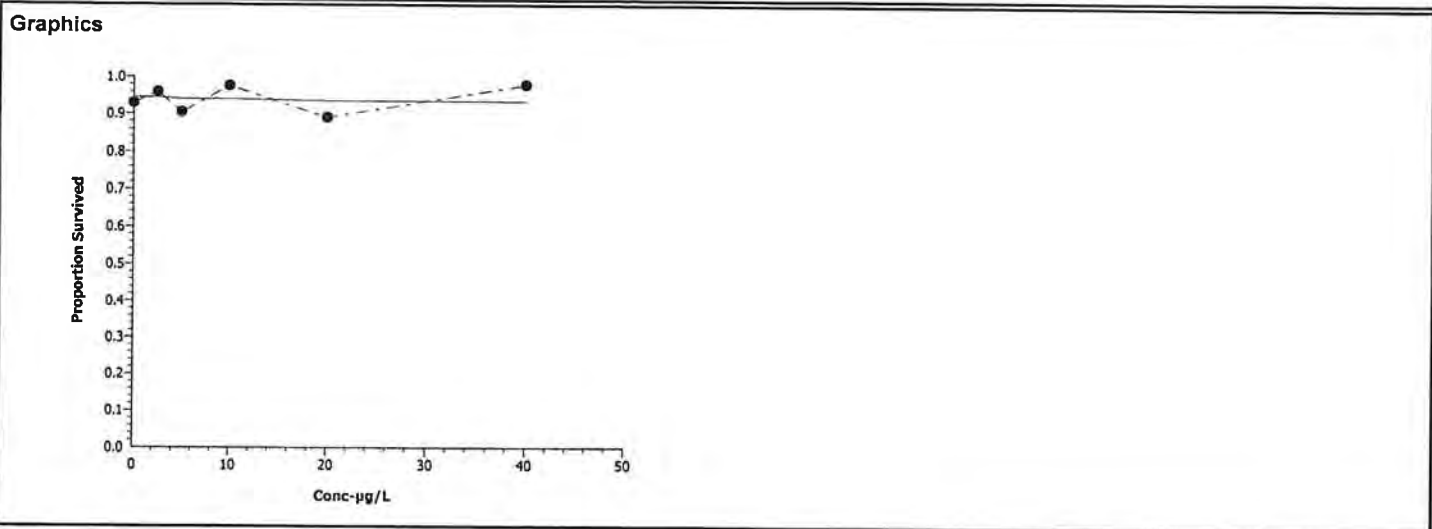
X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Log(X + 1)	Linear	57951	200	Yes	Two-Point Interpolation

Point Estimates

% Effect	Conc-µg/L	95% LCL	95% UCL
5	> 40	N/A	N/A
10	> 40	N/A	N/A
15	> 40	N/A	N/A
20	> 40	N/A	N/A
25	> 40	N/A	N/A
40	> 40	N/A	N/A
50	> 40	N/A	N/A

Data Summary

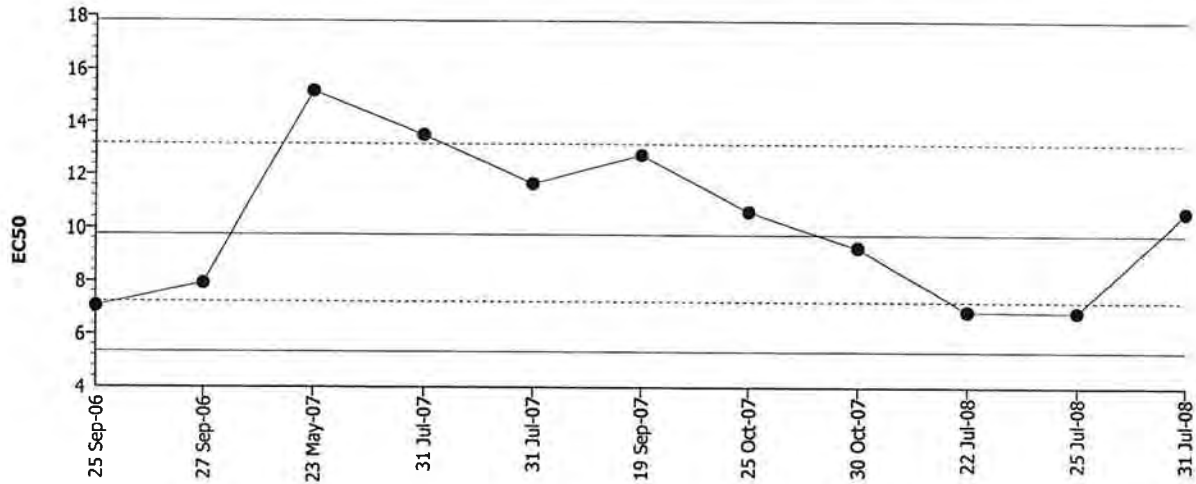
Conc-µg/L	Control Type	Count	Calculated Variate(A/B)						
			Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.92879	0.82727	1.00000	0.01842	0.09026	613	660
2.5		3	0.95909	0.93182	1.00000	0.00736	0.03608	633	660
5		3	0.90455	0.76818	1.00000	0.02474	0.12120	597	660
10		3	0.97576	0.92727	1.00000	0.00857	0.04199	644	660
20		3	0.89091	0.71364	1.00000	0.03161	0.15488	588	660
40		3	0.98030	0.94091	1.00000	0.00696	0.03412	647	660



CETIS QC Chart

Echinoid Embryo-Larval Survival and Development Test NewFields

Test Type: Development-Survival **Organism:** Dendraster excentricus (Sand Dollar) **Material:** Copper sulfate
Protocol: PSEP (1995) **Endpoint:** Combined Proportion Normal **Source:** Reference Toxicant-REF



Mean: 9.76411 **Count:** 10 **-1s Warning Limit:** 7.22417 **-2s Action Limit:** 5.34495
Sigma: **CV:** 35.16% **+1s Warning Limit:** 13.1971 **+2s Action Limit:** 17.837

Quality Control Data										
Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Sep	25	7.04115	-2.72295	-1.08517	(-)		15-9124-4449	18-8842-3071
2			27	7.90964	-1.85447	-0.69912			12-0508-6315	07-6968-1917
3	2007	May	23	15.19628	5.43217	1.46819	(+)		01-4296-4787	06-9987-0548
4		Jul	31	13.53571	3.77160	1.08410	(+)		13-9151-2777	08-5753-6202
5			31	11.65216	1.88805	0.58676			02-7352-2736	03-6589-2232
6		Sep	19	12.76013	2.99602	0.88825			09-8513-0350	12-7060-7882
7		Oct	25	10.61481	0.85070	0.27727			12-7566-1317	05-9269-8329
8			30	9.27897	-0.48514	-0.16915			12-1647-2406	05-7500-9251
9	2008	Jul	22	6.86579	-2.89832	-1.16889	(-)		20-1766-4632	16-1211-4783
10			25	6.83822	-2.92589	-1.18224	(-)		10-7779-9263	03-8497-6987
11			31	10.59260	0.82849	0.27032			21-0046-3420	02-8271-0933

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	QUANTITY OF TOXICANT: 0.039 mL	QUANTITY OF DILUENT: 500mL	INIT TS
TEST ID P070930.69	LOT #: 1704237	0.03990	ACTUAL: 500.02	TIME 1500
		TEST START DATE: 7/31/08	TIME 1730	TEST END DATE 8/3/08

WATER QUALITY DATA

DILTN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL		REFERENCE TOXICANT		
FSW073108.01				Copper Sulfate		Copper		
CLIENT/NEWFIELDS ID	CONCENTRATION		DO (mg/L)	TEMP (C)	SAL (ppt)	pH	DATE	
	value	units						
Ref.Tox.-Copper	0	µg/L	meter	meter	meter	meter		
			4	4	4	4	7.4	7/31
			4	4	4	4	7.7	8/1
			4	4	4	4	7.6	8/2
			4	4	4	4	7.8	8/3
Ref.Tox.-Copper	2.5	µg/L	meter	meter	meter	meter		
			4	4	4	4	7.6	7/31
			4	4	4	4	7.8	8/1
			4	4	4	4	7.7	8/2
			4	4	4	4	7.9	8/3
Ref.Tox.-Copper	5	µg/L	meter	meter	meter	meter		
			4	4	4	4	7.7	7/31
			4	4	4	4	7.9	8/1
			4	4	4	4	7.7	8/2
			4	4	4	4	7.9	8/3

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	QUANTITY OF TOXICANT: 0.039 mL	QUANTITY OF DILUENT: 500mL	INIT
TEST ID	LOT #:	TEST START DATE:	TEST END DATE:	TIME
		ACTUAL:		

WATER QUALITY DATA

DIL TIN. WAT. BATCH		TEMP REC#		REFERENCE TOX. MATERIAL		REFERENCE TOXICANT	
FSW073108.01				Copper Sulfate		Copper	
CLIENT/NEWFIELDS ID	TEST CONDITIONS		DO (mg/L)	TEMP (C)	SAL (ppt)	pH	DATE
	CONCENTRATION value	units					
Ref. Tox.-Copper	10	µg/L	>4.8	15 ± 1	28 ± 1	7.8 ± 0.5	
			meter	meter	meter	meter	unit
			D.O.	TEMP.	SALINITY	pH	
			mg/L	°C	ppt		
			meter	meter	meter	meter	unit
			4	16.2	1	7.8	TS 7/31
			4	15.1	1	7.9	CR 8/1
			4	15.3	1	7.8	TS 8/2
			4	14.9	1	7.9	TS 8/3
			4	15.2	1	7.8	TS 7/31
			4	15.0	1	7.9	CR 8/1
			4	15.3	1	7.8	TS 8/2
			4	14.8	1	7.9	TS 8/3
			4	15.1	1	7.8	TS 7/31
			4	14.7	1	7.9	CR 8/1
			4	15.2	1	7.8	TS 8/2
			4	14.7	1	7.9	TS 8/3
			4	15.1	1	7.8	TS 7/31
			4	14.7	1	7.9	CR 8/1
			4	15.2	1	7.8	TS 8/2
			4	14.7	1	7.9	TS 8/3
			4	15.1	1	7.8	TS 7/31
			4	14.7	1	7.9	CR 8/1
			4	15.2	1	7.8	TS 8/2
			4	14.7	1	7.9	TS 8/3

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST DATA SHEET 1



SPECIES <i>Dendraster excentricus</i>	
CLIENT Ecology & Environment	PROJECT Port Angeles
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner
NEWFIELDS LAB / LOCATION Port Gamble / Incubator	PROTOCOL PSEP (1995)

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	207	4	9/22/08	CR	
				2	219	4			
				3	173	9			
Ref.Tox. - Copper	2.5	µg/L		1	198	7			
				2	216	17			
				3	191	17			
Ref.Tox. - Copper	5	µg/L		1	194	14			
				2	209	15			
				3	152	17			
Ref.Tox. - Copper	10	µg/L		1	115	89			
				2	131	100			
				3	125	106			
Ref.Tox. - Copper	20	µg/L		1	10	147			
				2	6	205			
				3	11	256			
Ref.Tox. - Copper	40	µg/L		1	0	207			
				2	0	242			
				3	0	241			↓

STOCKING DENSITY		1	194			
		2	211			
		3	254			

BIVALV ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES <i>Dendraster excentricus</i>		
CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
STOCKING DENSITY	1	NA	231	9/4/08	BH	
	2	↓	242	↓	↓	
	3	↓	212	↓	↓	
	4	↓	266	↓	↓	
	5	↓	311	↓	↓	
Control /	1	212	2			
	2	235	2			
	3	257	6			
	4	245	2			
	5	236	7			
RF01A /	1	231	1			
	2	243	0			
	3	253	1			
	4	248	0			
	5	241	0			
RF02A /	1	214	2			
	2	289	1			
	3	233	0			
	4	215	1			
	5	262	3			
RF03A /	1	240	6			
	2	205	5			
	3	229	6			
	4	179	9			
	5	190	1			

BIVALV' ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES <i>Dendraster excentricus</i>		
CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
21 E102A /	1	303	5	9/1/08	BG	
	2	250	2			
	3	241	2			
	4	245	2			
	5	237	1			
26 IE07A /	1	187	4			
	2	158	5			
	3	183	5			
	4	159	1			
	5	131	1			
31 RL01A /	1	249	4			
	2	260	3			
	3	236	3			
	4	236	0			
	5	245	3			
36 RL02A /	1	261	4			
	2	282	5			
	3	235	6			
	4	274	7			
	5	249	3			
41 CO01A /	1	241	0			
	2	193	1			
	3	207	4			
	4	209	2			
	5	192	0			

BIVALV ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES <i>Dendraster excentricus</i>		
CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860
PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
46 CO04A /	1	246	0	9/2/08	BLP	
	2	241	1			
	3	288	0			
	4	244	1			
	5	215	0			
51 EC01A /	1	209	2			
	2	214	4			
	3	252	3			
	4	187	5			
	5	218	2			
56 EC02A /	1	216	0			
	2	302	3			Test volume reduce to crack in glass jar
	3	191	3			Final volume ~600mL
	4	224	5			
	5	206	3			
4 LA02A /	1	86	1			
	2	119	2			
	3	40	1			
	4	53	2			
	5	52	2			
66 Sediment Control /	1	262	1			
	2	234	1			
	3	262	3			
	4	234	4			
	5	239	1			

BIVALV ARVAE SUSPENDED PARTICULATE PH/ TEST



SPECIES
Dendraster excentricus

CLIENT Ecology & Environment	PROJECT Port Angeles	JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
71 EC01A-Acclimated /	1	199	2	9/8/08	BH	
	2	199	6	↓	↓	
	3	248	1	↓	↓	
	4	219	5	↓	↓	
	5	202	2	↓	↓	



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: E & E Port Angeles	Organism: Larval Batch #4	NewFields Test ID:	Test Duration (days):
--	-------------------------------------	---------------------------	------------------------------

PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 7/31/08
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:	
7/31/08	19.0	

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
H2O \emptyset	Surr	TS 7/31/08	<0.5	19	TS 7/31/08	N	NA \rightarrow		0.002
Sed \emptyset			<0.5						0.004
RFO1			<0.5						0.012
RFO2			<0.5						0.027
RFO3			<0.5						0.168
EFO2			<0.5						0.043
IE07			<0.5						0.182
RLO1			<0.5						0.033
RLO2			<0.5						0.028
COO1			<0.5						0.047
COO4			<0.5						0.029
ECO1			<0.5						0.060
ECO2			<0.5						0.007
LAO2			<0.5						0.371
ECO1-ACC			<0.5						0.024

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE 08/03/08	TIME 1800
		TIME 1730		

WATER QUALITY DATA																
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)	
Control /	0	72	WQ Surr	4	8.0	4	15.9	1	28	1	8.0					CR 7/31/08
Control /	1	72	WQ Surr	4	7.7	4	14.9	1	28	1	8.0					CR 8/1/08
Control /	2	72	WQ Surr	4	7.5	4	15.5	1	28	1	7.6					TS 8/2/08
Control /	3	72	WQ Surr	4	7.2	4	15.6	1	28	1	7.7					TS 8/3
Control /	4	72	WQ Surr													
RF01A /	0	22	WQ Surr	4	8.1	4	15.6	1	28	1	7.9					CR 7/31/08
RF01A /	1	22	WQ Surr	4	7.6	4	15.3	1	28	1	7.9					CR 8/1/08
RF01A /	2	22	WQ Surr	4	7.5	4	15.8	1	28	1	7.7					TS 8/2/08
RF01A /	3	22	WQ Surr	4	7.6	4	15.9	1	28	1	7.7					TS 8/3
RF01A /	4	22	WQ Surr													
RF02A /	0	21	WQ Surr	4	8.0	4	16.0	1	28	1	7.9					CR 7/31/08
RF02A /	1	21	WQ Surr	4	7.4	4	16.0	1	28	1	7.9					CR 8/1/08
RF02A /	2	21	WQ Surr	4	7.7	4	16.0	1	28	1	7.8					TS 8/2/08
RF02A /	3	21	WQ Surr	4	7.8	4	16.8	1	28	1	7.9					TS 8/3
RF02A /	4	21	WQ Surr													

OWC CR-7/31

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB/LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE	TIME

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

CLIENT/NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		TECH	DATE
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (total)		
RF03A/	0	45	WQ Surr	4	7.3	4	16.0	1	28	1	7.9					CR	7/31
RF03A/	1	45	WQ Surr	4	6.2	4	15.1	1	28	1	7.9					CR	8/1
RF03A/	2	45	WQ Surr	4	6.0	4	15.8	1	28	1	7.6					TS	8/2
RF03A/	3	45	WQ Surr	4	5.8	4	16.0	1	28	1	7.6					TS	8/3
RF03A/	4	45	WQ Surr														
EI02A/	0	50	WQ Surr	4	7.9	4	16.0	1	28	1	7.9					CR	7/31
EI02A/	1	50	WQ Surr	4	7.1	4	15.1	1	28	1	7.9					CR	8/1
EI02A/	2	50	WQ Surr	4	6.8	4	15.5	1	28	1	7.6					TS	8/2
EI02A/	3	50	WQ Surr	4	7.0	4	16.0	1	28	1	7.6					TS	8/3
EI02A/	4	50	WQ Surr														
IE07A/	0	70	WQ Surr	4	6.7	4	16.2	1	28	1	7.9					CR	7/31
IE07A/	1	70	WQ Surr	4	5.4	4	15.1	1	28	1	7.8					CR	8/1
IE07A/	2	70	WQ Surr	4	6.0	4	16.6	1	28	1	7.5					TS	8/2
IE07A/	3	70	WQ Surr	4	5.2	4	15.5	1	28	1	7.6					TS	8/3
IE07A/	4	70	WQ Surr														

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE
PROTOCOL PSEP (1995)			

WATER QUALITY DATA																
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	DO (mg/L)		Temp (°C)		SALINITY		pH		Ammonia		Sulfide		
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)	
RL01A/	0	74	WQ Surr	4	7.7	4	16.4	1	28	1	7.9					CR 7/31
RL01A/	1	74	WQ Surr	4	6.3	4	15.7	1	28	1	7.8					CR 8/1
RL01A/	2	74	WQ Surr	4	6.6	4	15.5	1	28	1	7.5					TS 8/2
RL01A/	3	74	WQ Surr	4	6.2	4	15.9	1	28	1	7.6					TS 8/3
RL01A/	4	74	WQ Surr													
RL02A/	0	66	WQ Surr	4	7.9	4	16.0	1	28	1	7.9					CR 7/31
RL02A/	1	66	WQ Surr	4	6.6	4	15.3	1	28	1	7.9					CR 8/1
RL02A/	2	66	WQ Surr	4	6.4	4	15.5	1	28	1	7.6					TS 8/2
RL02A/	3	66	WQ Surr	4	6.4	4	15.6	1	28	1	7.6					TS 8/3
RL02A/	4	66	WQ Surr													
CO01A/	0	16	WQ Surr	4	7.9	4	16.0	1	28	1	7.8					CR 7/31/08
CO01A/	1	16	WQ Surr	4	7.0	4	16.0	1	28	1	7.9					CR 8/1/08
CO01A/	2	16	WQ Surr	4	7.3	4	16.0	1	28	1	7.8					TS 8/2
CO01A/	3	16	WQ Surr	4	7.5	4	15.9	1	28	1	7.8					TS 8/3
CO01A/	4	16	WQ Surr													

* Day 2 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7	PROTOCOL PSEP (1995)
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31 Jul 08	TEST END DATE	TIME

WATER QUALITY DATA

CLIENT/NEWFIELDS ID	TEST CONDITIONS		DO (mg/L) >4.8	Temp (°C) 16 ± 1	Salinity ppt	pH		Ammonia mg/L (total)	Sulfide		DATE
	DAY	Random #				REP	meter		unit	Techn.	
CO04A /	0	44	4	16.3	28	meter	7.9				CR 7/31
CO04A /	1	44	4	15.2	28	meter	7.9				CR 8/1
CO04A /	2	44	4	15.9	28	meter	7.7				TS 8/2
CO04A /	3	44	4	16.0	28	meter	7.8				TS 8/3
CO04A /	4	44									
EC01A /	0	73	4	16.4	28	meter	7.8				CR 7/31
EC01A /	1	73	4	15.0	28	meter	7.8				CR 8/1
EC01A /	2	73	4	15.6	28	meter	7.5				TS 8/2
EC01A /	3	73	4	15.9	28	meter	7.6				TS 8/3
EC01A /	4	73									
EC02A /	0	71	4	16.0	28	meter	7.9				CR 7/31
EC02A /	1	71	4	15.8	28	meter	7.9				CR 8/1
EC02A /	2	71	4	15.3	28	meter	7.4				TS 8/2
EC02A /	3	71	4	15.3	28	meter	7.6				TS 8/3
EC02A /	4	71									

* Day 3 observations needed only if development endpoint not met by day 2

BIVALVE LARVAE SUSPENDED PARTICULATE PHASE TEST

CLIENT Ecology & Environment	PROJECT Port Angeles	SPECIES <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 7
JOB NUMBER 1101-004-860	PROJECT MANAGER Bill Gardiner	TEST START DATE 31Jul08	TEST END DATE
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

CLIENT/ NEWFIELDS ID	TEST CONDITIONS		DO (mg/L) >4.8	Temp (°C) 16 ± 1	Salinity (ppt) 28 ± 1	pH 7.8 ± 0.5	Ammonia NA	Sulfide NA	DATE			
	DAY	Random #								REP	meter	meter
LA02A/	0	31	4	16.0	28	7.8			CR 7/31			
LA02A/	1	31	4	15.4	28	7.9			CR 8/1			
LA02A/	2	31	4	15.9	28	7.7			TS 8/2			
LA02A/	3	31	4	16.0	28	7.7			TS 8/3			
LA02A/	4	31										
Sediment Control /	0		4	16.0	28	7.9			CR 7/31			
Sediment Control /	1		4	15.3	28	7.9			CR 8/1			
Sediment Control /	2		4	15.8	28	7.7			TS 8/2			
Sediment Control /	3		4	15.8	28	7.8			TS 8/3			
Sediment Control /	4											
EC01A-acclimated /	0		4	15.8	28	7.9			CR 7/31/08			
EC01A-acclimated /	1		4	16.0	28	7.8			CR 8/1/08			
EC01A-acclimated /	2		4	15.9	28	7.7			TS 8/2			
EC01A-acclimated /	3		4	16.0	28	7.7			TS 8/3			
EC01A-acclimated /	4											

* Day 3 observations needed only if development endpoint not met by day 2

*BIOLOGICAL TESTING RESULTS FOR
PORT ANGELES HARBOR SEDIMENT
CHARACTERIZATION,
PORT ANGELES, WASHINGTON*

APPENDIX C

STATISTICAL COMPARISONS

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
E. estuarius Batch 1	Percent Mortality	REF01A	Control	0.153	0.232	T-test Equal Var	0.173		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	REF02A	Control	0.037	0.035	Rankit Unequal Var	0.297		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	REF03A	Control	0.141	0.456	T-test Equal Var	0.041	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	BA01A	REF01A	0.100	0.835	T-test Equal Var	0.115		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	EH02A	REF01A	0.075	0.749	T-test Equal Var	0.566		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	FP01A	REF01A	0.201	0.241	T-test Equal Var	0.387		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE03A	REF01A	0.571	0.803	T-test Equal Var	0.074		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE04A	REF01A	0.667	0.028	T-test Unequal Var	0.134		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE06A	REF01A	0.335	0.376	T-test Equal Var	0.340		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE14A	REF01A	0.479	0.097	T-test Unequal Var	0.024	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	IE15A	REF01A	0.510	0.073	T-test Unequal Var	0.023	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	MA02A	REF01A	0.021	0.698	Mann-Whitney	0.458		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA05A	REF01A	0.335	0.376	T-test Equal Var	0.340		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA06A	REF01A	0.089	0.484	T-test Equal Var	0.013	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	BA01A	REF02A	0.578	0.433	T-test Equal Var	0.096		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	EH02A	REF02A	0.033	0.278	Mann-Whitney	0.500		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	FP01A	REF02A	0.418	0.074	T-test Unequal Var	0.304		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE03A	REF02A	0.715	0.843	T-test Equal Var	0.063		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE04A	REF02A	0.239	0.004	T-test Unequal Var	0.117		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE06A	REF02A	0.463	0.136	T-test Equal Var	0.268		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE14A	REF02A	0.130	0.015	T-test Unequal Var	0.028	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	IE15A	REF02A	0.103	0.016	T-test Unequal Var	0.028	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	MA02A	REF02A	0.053	0.568	T-test Equal Var	0.353		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA05A	REF02A	0.463	0.136	T-test Equal Var	0.268		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA06A	REF02A	0.024	0.112	Mann-Whitney	0.043	Yes	Treatment > Comparison
E. estuarius Batch 1	Percent Mortality	BA01A	REF03A	0.028	0.914	Mann-Whitney	0.376		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	EH02A	REF03A	0.598	0.868	T-test Equal Var	0.846		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	FP01A	REF03A	0.208	0.367	T-test Equal Var	0.756		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE03A	REF03A	0.343	0.772	T-test Equal Var	0.215		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE04A	REF03A	0.272	0.112	T-test Equal Var	0.485		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE06A	REF03A	0.181	0.501	T-test Equal Var	0.703		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE14A	REF03A	0.391	0.251	T-test Equal Var	0.122		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	IE15A	REF03A	0.206	0.173	T-test Equal Var	0.117		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA02A	REF03A	0.096	0.696	T-test Equal Var	0.751		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA05A	REF03A	0.181	0.501	T-test Equal Var	0.703		Treatment <= Comparison
E. estuarius Batch 1	Percent Mortality	MA06A	REF03A	0.253	0.674	T-test Equal Var	0.067		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	REF01A	Control	0.016	0.888	Mann-Whitney	0.371		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	REF02A	Control	0.225	0.626	T-test Equal Var	0.925		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	REF03A	Control	0.055	0.028	T-test Unequal Var	0.361		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL01A	REF01A	0.803	0.707	T-test Equal Var	0.055		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL02A	REF01A	0.136	0.590	T-test Equal Var	0.077		Treatment <= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
E. estuarius Batch 2	Percent Mortality	BL03A	REF01A	0.323	0.432	T-test Equal Var	0.227		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL04A	REF01A	0.109	0.169	T-test Equal Var	0.542		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL06A	REF01A	0.088	0.356	T-test Equal Var	0.034	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	CO02A	REF01A	0.576	0.241	T-test Equal Var	0.835		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	DO03A	REF01A	0.125	0.572	T-test Equal Var	0.198		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	DO04A	REF01A	0.195	0.099	T-test Unequal Var	0.363		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT01A	REF01A	0.033	0.513	Mann-Whitney	0.097		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT04A	REF01A	0.299	0.510	T-test Equal Var	0.322		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT06A	REF01A	0.131	0.504	T-test Equal Var	0.299		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT11A	REF01A	0.320	0.406	T-test Equal Var	0.213		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IE09A	REF01A	0.051	0.195	T-test Equal Var	0.609		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH01A	REF01A	0.001	0.053	Rankit Unequal Var	0.987		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH02A	REF01A	0.166	0.109	T-test Equal Var	0.130		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH03A	REF01A	0.003	0.071	Rankit Equal Var	0.585		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH05A	REF01A	0.410	0.004	T-test Unequal Var	0.061		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH06A	REF01A	0.109	0.169	T-test Equal Var	0.542		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP01A	REF01A	0.571	0.104	T-test Equal Var	0.114		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP02A	REF01A	0.140	0.372	T-test Equal Var	0.151		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP03A	REF01A	0.126	0.170	T-test Equal Var	0.491		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP05A	REF01A	0.016	0.888	Mann-Whitney	0.371		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP06A	REF01A	0.109	0.169	T-test Equal Var	0.542		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	MA01A	REF01A	0.134	0.724	T-test Equal Var	0.349		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	OH02A	REF01A	0.144	0.407	T-test Equal Var	0.008	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	BL01A	REF02A	0.037	0.732	Mann-Whitney	0.028	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	BL02A	REF02A	0.024	0.028	Rankit Equal Var	0.006	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	BL03A	REF02A	0.752	0.665	T-test Equal Var	0.050		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL04A	REF02A	0.153	0.232	T-test Equal Var	0.173		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL06A	REF02A	0.021	0.619	Mann-Whitney	0.028	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	CO02A	REF02A	0.004	0.347	Mann-Whitney	0.454		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	DO03A	REF02A	0.766	0.847	T-test Equal Var	0.042	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	DO04A	REF02A	0.472	0.133	T-test Equal Var	0.123		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT01A	REF02A	0.090	0.771	T-test Equal Var	0.029	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	FT04A	REF02A	0.326	0.738	T-test Equal Var	0.087		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT06A	REF02A	0.100	0.819	T-test Equal Var	0.061		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT11A	REF02A	0.728	0.604	T-test Equal Var	0.052		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IE09A	REF02A	0.029	0.255	Mann-Whitney	0.194		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH01A	REF02A	0.022	0.000	Rankit Unequal Var	0.911		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH02A	REF02A	0.060	0.143	T-test Equal Var	0.031	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	IH03A	REF02A	0.003	0.085	Rankit Equal Var	0.210		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH05A	REF02A	0.368	0.005	T-test Unequal Var	0.041	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	IH06A	REF02A	0.153	0.232	T-test Equal Var	0.173		Treatment <= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
E. estuarius Batch 2	Percent Mortality	KP01A	REF02A	0.602	0.143	T-test Equal Var	0.032	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	KP02A	REF02A	0.053	0.001	T-test Unequal Var	0.016	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	KP03A	REF02A	0.347	0.246	T-test Equal Var	0.161		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP05A	REF02A	0.225	0.626	T-test Equal Var	0.075		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP06A	REF02A	0.153	0.232	T-test Equal Var	0.173		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	MA01A	REF02A	0.379	0.869	T-test Equal Var	0.068		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	OH02A	REF02A	0.057	0.007	T-test Unequal Var	0.002	Yes	Treatment > Comparison
E. estuarius Batch 2	Percent Mortality	BL01A	REF03A	0.148	0.016	T-test Unequal Var	0.285		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL02A	REF03A	0.249	0.001	T-test Unequal Var	0.391		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL03A	REF03A	0.094	0.212	T-test Equal Var	0.462		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL04A	REF03A	0.024	0.166	Mann-Whitney	0.766		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	BL06A	REF03A	0.044	0.039	Rankit Equal Var	0.161		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	CO02A	REF03A	0.060	0.036	T-test Unequal Var	0.866		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	DO03A	REF03A	0.076	0.187	T-test Equal Var	0.433		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	DO04A	REF03A	0.053	0.782	T-test Equal Var	0.551		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT01A	REF03A	0.024	0.201	Mann-Whitney	0.500		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT04A	REF03A	0.244	0.285	T-test Equal Var	0.537		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT06A	REF03A	0.025	0.097	Rankit Unequal Var	0.695		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	FT11A	REF03A	0.225	0.315	T-test Equal Var	0.434		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IE09A	REF03A	0.024	0.061	Rankit Unequal Var	0.825		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH01A	REF03A	0.048	0.000	Rankit Unequal Var	0.961		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH02A	REF03A	0.014	0.502	Mann-Whitney	0.264		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH03A	REF03A	0.009	0.203	Mann-Whitney	0.583		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH05A	REF03A	0.675	0.017	T-test Unequal Var	0.079		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	IH06A	REF03A	0.024	0.166	Mann-Whitney	0.766		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP01A	REF03A	0.221	0.899	T-test Equal Var	0.270		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP02A	REF03A	0.187	0.000	T-test Unequal Var	0.503		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP03A	REF03A	0.063	0.327	T-test Equal Var	0.665		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP05A	REF03A	0.055	0.028	T-test Unequal Var	0.639		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	KP06A	REF03A	0.024	0.166	Mann-Whitney	0.766		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	MA01A	REF03A	0.050	0.059	Rankit Unequal Var	0.723		Treatment <= Comparison
E. estuarius Batch 2	Percent Mortality	OH02A	REF03A	0.249	0.000	T-test Unequal Var	0.178		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	REF01A	Control	0.192	0.277	T-test Equal Var	0.404		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	REF02A	Control	0.598	0.015	T-test Unequal Var	0.099		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	REF03A	Control	0.646	0.056	T-test Unequal Var	0.008	Yes	Treatment > Comparison
E. estuarius Batch 3	Percent Mortality	DO05A	REF01A	0.284	0.382	T-test Equal Var	0.613		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	EC04A	REF01A	0.092	0.804	T-test Equal Var	0.970		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	ED03A	REF01A	0.249	0.559	T-test Equal Var	0.077		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	ED04A	REF01A	0.023	0.785	Mann-Whitney	0.014	Yes	Treatment > Comparison
E. estuarius Batch 3	Percent Mortality	ED05A	REF01A	0.501	0.652	T-test Equal Var	0.912		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	EI07A	REF01A	0.363	0.451	T-test Equal Var	0.146		Treatment <= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
E. estuarius Batch 3	Percent Mortality	MD01A	REF01A	0.092	0.160	T-test Equal Var	0.450		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD02A	REF01A	0.599	0.920	T-test Equal Var	0.037	Yes	Treatment > Comparison
E. estuarius Batch 3	Percent Mortality	MD03A	REF01A	0.274	0.097	T-test Unequal Var	0.397		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	WW01A	REF01A	0.086	0.815	T-test Equal Var	0.400		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	DO05A	REF02A	0.263	0.061	T-test Unequal Var	0.900		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	EC04A	REF02A	0.043	0.326	Mann-Whitney	0.984		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	ED03A	REF02A	0.191	0.645	T-test Equal Var	0.393		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	ED04A	REF02A	0.002	0.168	Mann-Whitney	0.014	Yes	Treatment > Comparison
E. estuarius Batch 3	Percent Mortality	ED05A	REF02A	0.045	0.015	Rankit Equal Var	0.998		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	EI07A	REF02A	0.112	0.147	T-test Equal Var	0.384		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD01A	REF02A	0.258	0.017	T-test Unequal Var	0.772		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD02A	REF02A	0.317	0.172	T-test Equal Var	0.158		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD03A	REF02A	0.549	0.006	T-test Unequal Var	0.720		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	WW01A	REF02A	0.014	0.171	Mann-Whitney	0.815		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	DO05A	REF03A	0.604	0.152	T-test Equal Var	0.995		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	EC04A	REF03A	0.009	0.856	Mann-Whitney	0.986		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	ED03A	REF03A	0.143	0.731	T-test Equal Var	0.992		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	ED04A	REF03A	0.084	0.425	T-test Equal Var	0.000	Yes	Treatment > Comparison
E. estuarius Batch 3	Percent Mortality	ED05A	REF03A	0.015	0.123	Mann-Whitney	0.984		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	EI07A	REF03A	0.382	0.267	T-test Equal Var	0.891		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD01A	REF03A	0.405	0.044	T-test Unequal Var	0.970		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD02A	REF03A	0.899	0.635	T-test Equal Var	0.961		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	MD03A	REF03A	0.754	0.016	T-test Unequal Var	0.960		Treatment <= Comparison
E. estuarius Batch 3	Percent Mortality	WW01A	REF03A	0.309	0.445	T-test Equal Var	0.996		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	REF01A	Control	0.063	0.004	T-test Unequal Var	0.045	Yes	Treatment > Comparison
E. estuarius Batch 4	Percent Mortality	REF02A	Control	0.114	0.000	T-test Unequal Var	0.039	Yes	Treatment > Comparison
E. estuarius Batch 4	Percent Mortality	REF03A	Control	0.044	0.028	Rankit Unequal Var	0.014	Yes	Treatment > Comparison
E. estuarius Batch 4	Percent Mortality	CO01A	REF01A	0.043	0.939	Mann-Whitney	0.500		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	CO04A	REF01A	0.612	0.545	T-test Equal Var	0.271		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC01A A	REF01A	0.200	0.289	T-test Equal Var	0.378		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC01A U	REF01A	0.076	0.472	T-test Equal Var	0.373		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC02A	REF01A	0.680	0.983	T-test Equal Var	0.214		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EI02A	REF01A	0.066	0.772	T-test Equal Var	0.558		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	IE07A	REF01A	0.075	0.888	T-test Equal Var	0.782		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	LA02A	REF01A	0.023	1.000	Mann-Whitney	0.500		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	RL01A	REF01A	0.066	0.772	T-test Equal Var	0.558		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	RL02A	REF01A	0.108	0.543	T-test Equal Var	0.839		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	CO01A	REF02A	0.019	0.636	Mann-Whitney	0.415		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	CO04A	REF02A	0.296	0.650	T-test Equal Var	0.210		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC01A A	REF02A	0.152	0.321	T-test Equal Var	0.304		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC01A U	REF02A	0.038	0.201	Mann-Whitney	0.264		Treatment <= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
E. estuarius Batch 4	Percent Mortality	EC02A	REF02A	0.588	0.831	T-test Equal Var	0.165		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EI02A	REF02A	0.009	1.000	Mann-Whitney	0.500		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	IE07A	REF02A	0.080	0.947	T-test Equal Var	0.756		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	LA02A	REF02A	0.066	0.772	T-test Equal Var	0.442		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	RL01A	REF02A	0.009	1.000	Mann-Whitney	0.500		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	RL02A	REF02A	0.178	0.653	T-test Equal Var	0.823		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	CO01A	REF03A	0.857	0.817	T-test Equal Var	0.846		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	CO04A	REF03A	0.834	0.482	T-test Equal Var	0.719		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC01A A	REF03A	0.599	0.304	T-test Equal Var	0.817		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC01A U	REF03A	0.568	0.839	T-test Equal Var	0.763		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EC02A	REF03A	0.790	0.798	T-test Equal Var	0.628		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	EI02A	REF03A	0.918	0.636	T-test Equal Var	0.884		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	IE07A	REF03A	0.134	0.732	T-test Equal Var	0.946		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	LA02A	REF03A	0.850	0.795	T-test Equal Var	0.849		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	RL01A	REF03A	0.918	0.636	T-test Equal Var	0.884		Treatment <= Comparison
E. estuarius Batch 4	Percent Mortality	RL02A	REF03A	0.170	0.483	T-test Equal Var	0.965		Treatment <= Comparison
E. estuarius Retest	Percent Mortality	RF01A	Control	0.004	0.347	Mann-Whitney	0.454		Treatment <= Comparison
E. estuarius Retest	Percent Mortality	RF02A	Control	0.014	1.000	Mann-Whitney	0.321		Treatment <= Comparison
E. estuarius Retest	Percent Mortality	RF03A	Control	0.265	0.467	T-test Equal Var	0.211		Treatment <= Comparison
E. estuarius Retest	Percent Mortality	ED04A	REF01A	0.048	0.000	Rankit Unequal Var	0.001	Yes	Treatment > Comparison
E. estuarius Retest	Percent Mortality	IH05A	REF01A	0.048	0.000	Rankit Unequal Var	0.907		Treatment <= Comparison
E. estuarius Retest	Percent Mortality	ED04A	REF02A	0.022	0.000	Rankit Unequal Var	0.001	Yes	Treatment > Comparison
E. estuarius Retest	Percent Mortality	IH05A	REF02A	0.022	0.000	Rankit Unequal Var	0.965		Treatment <= Comparison
E. estuarius Retest	Percent Mortality	ED04A	REF03A	0.063	0.004	T-test Unequal Var	0.000	Yes	Treatment > Comparison
E. estuarius Retest	Percent Mortality	IH05A	REF03A	0.063	0.004	T-test Unequal Var	0.955		Treatment <= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Neanthes Batch 1	Individual Growth	RF01A	Control	0.482	0.943	T-test Equal Var	0.292		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	RF02A	Control	0.497	0.087	T-test Unequal Var	0.465		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	RF03A	Control	0.019	0.238	Mann-Whitney	0.213		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BA01A	REF01A	0.208	0.167	T-test Equal Var	0.732		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL02A	REF01A	0.459	0.923	T-test Equal Var	0.411		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL03A	REF01A	0.231	0.331	T-test Equal Var	0.002	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	BL04A	REF01A	0.188	0.985	T-test Equal Var	0.094		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL06A	REF01A	0.272	0.314	T-test Equal Var	0.007	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	EH02A	REF01A	0.562	0.261	T-test Equal Var	0.595		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FP01A	REF01A	0.065	0.304	T-test Equal Var	0.220		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT04A	REF01A	0.116	0.721	T-test Equal Var	0.775		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT06A	REF01A	0.277	0.911	T-test Equal Var	0.013	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	FT11A	REF01A	0.152	0.985	T-test Equal Var	0.043	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	IE03A	REF01A	0.356	0.136	T-test Equal Var	0.641		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE06A	REF01A	0.124	0.717	T-test Equal Var	0.382		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE09A	REF01A	0.193	0.412	T-test Equal Var	0.904		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE14A	REF01A	0.138	0.673	T-test Equal Var	0.155		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE15A	REF01A	0.366	0.532	T-test Equal Var	0.499		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IH01A	REF01A	0.106	0.281	T-test Equal Var	0.554		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IH02A	REF01A	0.249	0.135	T-test Equal Var	0.486		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	KP06A	REF01A	0.085	0.224	T-test Equal Var	0.095		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA05A	REF01A	0.055	0.309	T-test Equal Var	0.197		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA06A	REF01A	0.959	0.961	T-test Equal Var	0.887		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	OH02A	REF01A	0.562	0.663	T-test Equal Var	0.237		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT01A	REF01A	0.040	0.587	Mann-Whitney	0.213		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE04A	REF01A	0.042	0.895	Mann-Whitney	0.343		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	KP05A	REF01A	0.044	0.689	Mann-Whitney	0.213		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA02A	REF01A	0.025	0.950	Mann-Whitney	0.017	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	BA01A	REF02A	0.162	0.793	T-test Equal Var	0.601		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL02A	REF02A	0.159	0.262	T-test Equal Var	0.331		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL03A	REF02A	0.742	0.020	T-test Unequal Var	0.018	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	BL04A	REF02A	0.473	0.116	T-test Equal Var	0.111		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL06A	REF02A	0.747	0.018	T-test Unequal Var	0.033	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	EH02A	REF02A	0.700	0.980	T-test Equal Var	0.490		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FP01A	REF02A	0.689	0.016	T-test Unequal Var	0.218		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT01A	REF02A	0.564	0.043	T-test Unequal Var	0.259		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT04A	REF02A	0.176	0.235	T-test Equal Var	0.615		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT06A	REF02A	0.554	0.085	T-test Unequal Var	0.034	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	FT11A	REF02A	0.446	0.080	T-test Unequal Var	0.073		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE03A	REF02A	0.221	0.936	T-test Equal Var	0.527		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE04A	REF02A	0.323	0.099	T-test Unequal Var	0.341		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE06A	REF02A	0.702	0.052	T-test Unequal Var	0.310		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE09A	REF02A	0.752	0.026	T-test Unequal Var	0.713		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE14A	REF02A	0.198	0.291	T-test Equal Var	0.152		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE15A	REF02A	0.342	0.605	T-test Equal Var	0.403		Treatment >= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Neanthes Batch 1	Individual Growth	IH01A	REF02A	0.100	0.394	T-test Equal Var	0.434		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	KP05A	REF02A	0.574	0.050	T-test Unequal Var	0.234		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	KP06A	REF02A	0.742	0.013	T-test Unequal Var	0.137		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA02A	REF02A	0.434	0.074	T-test Unequal Var	0.008	Yes	Treatment < Comparison
Neanthes Batch 1	Individual Growth	MA05A	REF02A	0.636	0.021	T-test Unequal Var	0.203		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA06A	REF02A	0.418	0.152	T-test Equal Var	0.735		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	OH02A	REF02A	0.483	0.377	T-test Equal Var	0.210		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IH02A	REF02A	0.023	0.973	Mann-Whitney	0.273		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL02A	REF03A	0.091	0.319	T-test Equal Var	0.755		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	EH02A	REF03A	0.313	0.797	T-test Equal Var	0.813		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE03A	REF03A	0.572	0.831	T-test Equal Var	0.837		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IH02A	REF03A	0.078	0.806	T-test Equal Var	0.766		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA06A	REF03A	0.084	0.253	T-test Equal Var	0.932		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	OH02A	REF03A	0.358	0.408	T-test Equal Var	0.641		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BA01A	REF03A	0.019	0.671	Mann-Whitney	0.838		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL03A	REF03A	0.009	0.122	Mann-Whitney	0.089		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL04A	REF03A	0.022	0.241	Mann-Whitney	0.273		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	BL06A	REF03A	0.009	0.119	Mann-Whitney	0.089		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FP01A	REF03A	0.007	0.119	Mann-Whitney	0.420		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT01A	REF03A	0.010	0.163	Mann-Whitney	0.580		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT04A	REF03A	0.021	0.332	Mann-Whitney	0.787		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT06A	REF03A	0.020	0.241	Mann-Whitney	0.089		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	FT11A	REF03A	0.014	0.230	Mann-Whitney	0.162		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE04A	REF03A	0.013	0.223	Mann-Whitney	0.580		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE06A	REF03A	0.015	0.183	Mann-Whitney	0.657		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE09A	REF03A	0.011	0.135	Mann-Whitney	0.935		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE14A	REF03A	0.016	0.365	Mann-Whitney	0.500		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IE15A	REF03A	0.034	0.548	Mann-Whitney	0.787		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	IH01A	REF03A	0.018	0.464	Mann-Whitney	0.787		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	KP05A	REF03A	0.012	0.179	Mann-Whitney	0.420		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	KP06A	REF03A	0.007	0.104	Mann-Whitney	0.213		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA02A	REF03A	0.011	0.231	Mann-Whitney	0.089		Treatment >= Comparison
Neanthes Batch 1	Individual Growth	MA05A	REF03A	0.008	0.116	Mann-Whitney	0.420		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	RF01A	Control	0.311	0.885	T-test Equal Var	0.906		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	RF02A	Control	0.530	0.689	T-test Equal Var	0.234		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	RF03A	Control	0.145	0.202	T-test Equal Var	0.418		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	BL01A	REF01A	0.466	0.140	T-test Equal Var	0.626		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	CO02A	REF01A	0.827	0.886	T-test Equal Var	0.134		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO03A	REF01A	0.680	0.250	T-test Equal Var	0.186		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO04A	REF01A	0.601	0.572	T-test Equal Var	0.089		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	EC04A	REF01A	0.253	0.066	T-test Unequal Var	0.046	Yes	Treatment < Comparison
Neanthes Batch 2	Individual Growth	ED03A	REF01A	0.465	0.481	T-test Equal Var	0.142		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED04A	REF01A	0.512	0.391	T-test Equal Var	0.016	Yes	Treatment < Comparison
Neanthes Batch 2	Individual Growth	ED05A	REF01A	0.579	0.721	T-test Equal Var	0.330		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	EI07A	REF01A	0.520	0.590	T-test Equal Var	0.007	Yes	Treatment < Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Neanthes Batch 2	Individual Growth	IH03A	REF01A	0.707	0.270	T-test Equal Var	0.191		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH05A	REF01A	0.107	0.847	T-test Equal Var	0.237		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH06A	REF01A	0.646	0.480	T-test Equal Var	0.187		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP01A	REF01A	0.362	0.587	T-test Equal Var	0.041	Yes	Treatment < Comparison
Neanthes Batch 2	Individual Growth	KP02A	REF01A	0.433	0.985	T-test Equal Var	0.271		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP03A	REF01A	0.155	0.839	T-test Equal Var	0.028	Yes	Treatment < Comparison
Neanthes Batch 2	Individual Growth	MD01A	REF01A	0.802	0.549	T-test Equal Var	0.055		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD02A	REF01A	0.247	0.755	T-test Equal Var	0.319		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD03A	REF01A	0.258	0.760	T-test Equal Var	0.157		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	WW01A	REF01A	0.430	0.801	T-test Equal Var	0.070		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO05A	REF01A	0.005	0.874	Mann-Whitney	0.064		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MA01A	REF01A	0.040	0.691	Mann-Whitney	0.657		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	BL01A	REF02A	0.838	0.051	T-test Unequal Var	0.955		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	CO02A	REF02A	0.330	0.440	T-test Equal Var	0.836		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO03A	REF02A	0.500	0.105	T-test Equal Var	0.760		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO04A	REF02A	0.772	0.261	T-test Equal Var	0.678		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO05A	REF02A	0.539	0.640	T-test Equal Var	0.411		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	EC04A	REF02A	0.269	0.225	T-test Equal Var	0.849		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED03A	REF02A	0.443	0.206	T-test Equal Var	0.773		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED04A	REF02A	0.178	0.909	T-test Equal Var	0.521		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED05A	REF02A	0.295	0.642	T-test Equal Var	0.975		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	EI07A	REF02A	0.705	0.261	T-test Equal Var	0.126		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH03A	REF02A	0.529	0.692	T-test Equal Var	0.967		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH05A	REF02A	0.997	0.583	T-test Equal Var	0.947		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH06A	REF02A	0.591	0.257	T-test Equal Var	0.768		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP01A	REF02A	0.750	0.884	T-test Equal Var	0.693		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP02A	REF02A	0.153	0.401	T-test Equal Var	0.957		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP03A	REF02A	0.995	0.589	T-test Equal Var	0.548		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MA01A	REF02A	0.942	0.811	T-test Equal Var	0.993		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD01A	REF02A	0.314	0.207	T-test Equal Var	0.592		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD02A	REF02A	0.537	0.798	T-test Equal Var	0.956		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD03A	REF02A	0.676	0.423	T-test Equal Var	0.801		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	WW01A	REF02A	0.850	0.664	T-test Equal Var	0.770		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	BL01A	REF03A	0.738	0.005	T-test Unequal Var	0.926		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	CO02A	REF03A	0.477	0.060	T-test Unequal Var	0.696		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO03A	REF03A	0.511	0.016	T-test Unequal Var	0.625		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO04A	REF03A	0.812	0.038	T-test Unequal Var	0.485		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	EC04A	REF03A	0.617	0.873	T-test Equal Var	0.633		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED03A	REF03A	0.462	0.026	T-test Unequal Var	0.620		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED04A	REF03A	0.219	0.139	T-test Equal Var	0.169		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	ED05A	REF03A	0.892	0.017	T-test Unequal Var	0.958		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	EI07A	REF03A	0.738	0.033	T-test Unequal Var	0.053		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH03A	REF03A	0.935	0.288	T-test Equal Var	0.961		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH05A	REF03A	0.385	0.041	T-test Unequal Var	0.899		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	IH06A	REF03A	0.161	0.074	T-test Unequal Var	0.633		Treatment >= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Neanthes Batch 2	Individual Growth	KP01A	REF03A	0.864	0.148	T-test Equal Var	0.413		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP02A	REF03A	0.605	0.003	T-test Unequal Var	0.920		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	KP03A	REF03A	0.601	0.041	T-test Unequal Var	0.262		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD01A	REF03A	0.715	0.011	T-test Unequal Var	0.368		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD02A	REF03A	0.218	0.235	T-test Equal Var	0.929		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MD03A	REF03A	0.107	0.114	T-test Equal Var	0.663		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	VV01A	REF03A	0.735	0.087	T-test Unequal Var	0.559		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	DO05A	REF03A	0.003	0.119	Mann-Whitney	0.306		Treatment >= Comparison
Neanthes Batch 2	Individual Growth	MA01A	REF03A	0.046	0.176	Mann-Whitney	0.935		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RF01A	Control	0.556	0.299	T-test Equal Var	0.199		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RF02A	Control	0.057	0.097	T-test Unequal Var	0.373		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RF03A	Control	0.888	0.346	T-test Equal Var	0.166		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	CO01A	REF01A	0.261	0.732	T-test Equal Var	0.363		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	CO04A	REF01A	0.618	0.372	T-test Equal Var	0.495		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC01A Acclimated	REF01A	0.706	0.711	T-test Equal Var	0.264		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC02A	REF01A	0.588	0.173	T-test Equal Var	0.730		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EI02A	REF01A	0.198	0.750	T-test Equal Var	0.971		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	LA02A	REF01A	0.080	0.121	T-test Equal Var	0.801		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RL01A	REF01A	0.776	0.810	T-test Equal Var	0.997		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RL02A	REF01A	0.102	0.605	T-test Equal Var	0.992		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC01A Unacclimated	REF01A	0.005	0.823	Mann-Whitney	0.065		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	IE07A	REF01A	0.008	0.668	Mann-Whitney	0.541		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	CO01A	REF02A	0.449	0.002	T-test Unequal Var	0.321		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	CO04A	REF02A	0.430	0.001	T-test Unequal Var	0.384		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC01A Acclimated	REF02A	0.275	0.010	T-test Unequal Var	0.262		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC01A Unacclimated	REF02A	0.208	0.007	T-test Unequal Var	0.154		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EI02A	REF02A	0.160	0.023	T-test Unequal Var	0.838		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	LA02A	REF02A	0.335	0.000	T-test Unequal Var	0.540		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RL01A	REF02A	0.379	0.004	T-test Unequal Var	0.935		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RL02A	REF02A	0.349	0.000	T-test Unequal Var	0.866		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC02A	REF02A	0.049	0.170	Mann-Whitney	0.580		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	IE07A	REF02A	0.039	0.052	Rankit Unequal Var	0.654		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	CO01A	REF03A	0.757	0.088	T-test Unequal Var	0.636		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	CO04A	REF03A	0.506	0.057	T-test Unequal Var	0.694		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC01A Acclimated	REF03A	0.787	0.160	T-test Equal Var	0.566		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC01A Unacclimated	REF03A	0.787	0.106	T-test Equal Var	0.420		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EC02A	REF03A	0.844	0.453	T-test Equal Var	0.798		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	EI02A	REF03A	0.919	0.178	T-test Equal Var	0.939		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	IE07A	REF03A	0.738	0.225	T-test Equal Var	0.743		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	LA02A	REF03A	0.278	0.034	T-test Unequal Var	0.798		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RL01A	REF03A	0.770	0.100	T-test Equal Var	0.978		Treatment >= Comparison
Neanthes UV Batch	Individual Growth	RL02A	REF03A	0.543	0.074	T-test Unequal Var	0.941		Treatment >= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Batch 1	Percent Normal Survival	RF01A	Control	0.071	0.065	T-test Unequal Var	0.930		Treatment >= Comparison
Larval Batch 1	Percent Normal Survival	RF02A	Control	0.061	0.102	T-test Equal Var	0.880		Treatment >= Comparison
Larval Batch 1	Percent Normal Survival	RF03A	Control	0.682	0.139	T-test Equal Var	0.005	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	BA01A	REF01A	0.348	0.951	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	BL06A	REF01A	0.603	0.835	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	EH02A	REF01A	0.358	0.453	T-test Equal Var	0.009	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	FP01A	REF01A	0.309	0.220	T-test Equal Var	0.006	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	FT06A	REF01A	0.179	0.566	T-test Equal Var	0.003	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	FT11A	REF01A	0.673	0.560	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE03A	REF01A	0.099	0.072	T-test Unequal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE04A	REF01A	0.668	0.381	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE06A	REF01A	0.294	0.688	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE14A	REF01A	0.695	0.552	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE15A	REF01A	1.000	0.997	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	KP05A	REF01A	0.155	0.160	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	KP06A	REF01A	0.379	0.475	T-test Equal Var	0.009	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA02A	REF01A	0.862	0.944	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA05A	REF01A	0.887	0.896	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA06A	REF01A	0.097	0.940	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	OH02A	REF01A	0.236	0.375	T-test Equal Var	0.024	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	BA01A	REF02A	0.433	0.947	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	BL06A	REF02A	0.734	0.949	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	EH02A	REF02A	0.579	0.458	T-test Equal Var	0.022	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	FP01A	REF02A	0.334	0.256	T-test Equal Var	0.015	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	FT06A	REF02A	0.513	0.551	T-test Equal Var	0.006	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	FT11A	REF02A	0.651	0.542	T-test Equal Var	0.003	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE03A	REF02A	0.085	0.109	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE04A	REF02A	0.418	0.390	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE06A	REF02A	0.280	0.816	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE14A	REF02A	0.853	0.644	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE15A	REF02A	0.995	0.915	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	KP05A	REF02A	0.208	0.198	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	KP06A	REF02A	0.509	0.546	T-test Equal Var	0.015	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA02A	REF02A	0.824	0.977	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA05A	REF02A	0.790	0.818	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA06A	REF02A	0.316	0.948	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	OH02A	REF02A	0.521	0.393	T-test Equal Var	0.054	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	BA01A	REF03A	0.867	0.145	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	BL06A	REF03A	0.885	0.129	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	EH02A	REF03A	0.777	0.559	T-test Equal Var	0.625		Treatment >= Comparison
Larval Batch 1	Percent Normal Survival	FP01A	REF03A	0.598	0.808	T-test Equal Var	0.560		Treatment >= Comparison
Larval Batch 1	Percent Normal Survival	FT06A	REF03A	0.440	0.377	T-test Equal Var	0.166		Treatment >= Comparison
Larval Batch 1	Percent Normal Survival	FT11A	REF03A	0.844	0.533	T-test Equal Var	0.056	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE03A	REF03A	0.924	0.174	T-test Equal Var	0.002	Yes	Treatment < Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Batch 1	Percent Normal Survival	IE04A	REF03A	0.706	0.864	T-test Equal Var	0.005	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE06A	REF03A	0.770	0.090	T-test Unequal Var	0.011	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE14A	REF03A	0.578	0.162	T-test Equal Var	0.009	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	IE15A	REF03A	0.500	0.237	T-test Equal Var	0.003	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	KP05A	REF03A	0.366	0.560	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	KP06A	REF03A	0.077	0.181	T-test Equal Var	0.136		Treatment >= Comparison
Larval Batch 1	Percent Normal Survival	MA02A	REF03A	0.663	0.356	T-test Equal Var	0.009	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA05A	REF03A	0.909	0.193	T-test Equal Var	0.018	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	MA06A	REF03A	0.309	0.081	T-test Unequal Var	0.001	Yes	Treatment < Comparison
Larval Batch 1	Percent Normal Survival	OH02A	REF03A	0.558	0.714	T-test Equal Var	0.894		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	RF02A	Control	0.186	0.613	T-test Equal Var	0.117		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	RF03A	Control	0.189	0.230	T-test Equal Var	0.007	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	RF01A	Control	0.014	0.767	Mann-Whitney	0.241		Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL01A	REF01A	0.891	0.006	T-test Unequal Var	0.012	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL02A	REF01A	0.401	0.149	T-test Equal Var	0.371		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	BL03A	REF01A	0.380	0.017	T-test Unequal Var	0.043	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL04A	REF01A	0.642	0.910	T-test Equal Var	0.003	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	EI07A	REF01A	0.899	0.228	T-test Equal Var	0.438		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	FT04A	REF01A	0.912	0.564	T-test Equal Var	0.992		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	IE09A	REF01A	0.848	0.719	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH01A	REF01A	0.901	0.737	T-test Equal Var	0.554		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	IH02A	REF01A	0.633	0.439	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH03A	REF01A	0.791	0.723	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH05A	REF01A	0.269	0.417	T-test Equal Var	0.200		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	IH06A	REF01A	0.367	0.464	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP01A	REF01A	0.098	0.037	T-test Unequal Var	0.077	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP02A	REF01A	0.871	0.202	T-test Equal Var	0.006	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP03A	REF01A	0.301	0.126	T-test Equal Var	0.922		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	MA01A	REF01A	0.321	0.189	T-test Equal Var	0.178		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	FT01A	REF01A	0.046	0.156	Mann-Whitney	0.089	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL01A	REF02A	0.834	0.175	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL02A	REF02A	0.613	0.762	T-test Equal Var	0.062	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL03A	REF02A	0.638	0.240	T-test Equal Var	0.007	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL04A	REF02A	0.085	0.155	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	EI07A	REF02A	0.266	0.440	T-test Equal Var	0.037	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	FT01A	REF02A	0.986	0.931	T-test Equal Var	0.012	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	FT04A	REF02A	0.050	0.111	T-test Equal Var	0.219		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	IH01A	REF02A	0.106	0.209	T-test Equal Var	0.038	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH03A	REF02A	0.118	0.252	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH05A	REF02A	0.118	0.290	T-test Equal Var	0.017	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP01A	REF02A	0.591	0.312	T-test Equal Var	0.013	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP02A	REF02A	0.413	0.580	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP03A	REF02A	0.106	0.485	T-test Equal Var	0.172		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	MA01A	REF02A	0.992	0.891	T-test Equal Var	0.022	Yes	Treatment < Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Batch 2	Percent Normal Survival	IE09A	REF02A	0.046	0.132	Mann-Whitney	0.017	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH06A	REF02A	0.041	0.100	Mann-Whitney	0.017	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH02A	REF02A	0.025	0.097	Rankit Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL01A	REF03A	0.915	0.030	T-test Unequal Var	0.004	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL02A	REF03A	0.898	0.332	T-test Equal Var	0.097	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL03A	REF03A	0.426	0.057	T-test Unequal Var	0.014	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	BL04A	REF03A	0.944	0.369	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	EI07A	REF03A	0.924	0.919	T-test Equal Var	0.048	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	FT01A	REF03A	0.339	0.399	T-test Equal Var	0.015	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	FT04A	REF03A	0.857	0.238	T-test Equal Var	0.449		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	IE09A	REF03A	0.688	0.298	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH01A	REF03A	0.987	0.530	T-test Equal Var	0.047	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH02A	REF03A	0.539	0.198	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH03A	REF03A	0.768	0.626	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH05A	REF03A	0.913	0.759	T-test Equal Var	0.016	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	IH06A	REF03A	0.497	0.206	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP01A	REF03A	0.176	0.097	T-test Unequal Var	0.025	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP02A	REF03A	0.770	0.738	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 2	Percent Normal Survival	KP03A	REF03A	0.683	0.801	T-test Equal Var	0.324		Treatment >= Comparison
Larval Batch 2	Percent Normal Survival	MA01A	REF03A	0.646	0.510	T-test Equal Var	0.028	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	RF01A	Control	0.596	0.178	T-test Equal Var	0.072	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	RF02A	Control	0.183	0.644	T-test Equal Var	0.235		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	RF03A	Control	0.558	0.989	T-test Equal Var	0.007	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	CO02A	REF01A	0.438	0.044	T-test Unequal Var	0.155		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO03A	REF01A	0.187	0.418	T-test Equal Var	0.456		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO04A	REF01A	0.281	0.634	T-test Equal Var	0.907		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO05A	REF01A	0.305	0.238	T-test Equal Var	0.983		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	EC04A	REF01A	0.783	0.876	T-test Equal Var	0.569		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	ED03A	REF01A	0.246	0.031	T-test Unequal Var	0.115		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	ED04A	REF01A	0.523	0.856	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	MD02A	REF01A	0.359	0.009	T-test Unequal Var	0.017	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	MD03A	REF01A	0.190	0.150	T-test Equal Var	0.004	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	ED05A	REF01A	0.003	0.773	Mann-Whitney	0.065	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	MD01A	REF01A	0.030	0.859	Mann-Whitney	0.065	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	WW01A	REF01A	0.016	0.754	Mann-Whitney	0.759		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	CO02A	REF02A	0.893	0.108	T-test Equal Var	0.085	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	DO03A	REF02A	0.882	0.772	T-test Equal Var	0.256		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO04A	REF02A	0.294	0.870	T-test Equal Var	0.715		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO05A	REF02A	0.406	0.745	T-test Equal Var	0.923		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	EC04A	REF02A	0.091	0.522	T-test Equal Var	0.270		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	ED03A	REF02A	0.383	0.071	T-test Unequal Var	0.072	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	ED04A	REF02A	0.543	0.534	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	ED05A	REF02A	0.760	0.548	T-test Equal Var	0.062	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	MD01A	REF02A	0.844	0.427	T-test Equal Var	0.042	Yes	Treatment < Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Batch 3	Percent Normal Survival	MD02A	REF02A	0.506	0.024	T-test Unequal Var	0.011	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	MD03A	REF02A	0.312	0.418	T-test Equal Var	0.003	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	WW01A	REF02A	0.701	0.505	T-test Equal Var	0.261		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	CO02A	REF03A	0.756	0.161	T-test Equal Var	0.543		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO03A	REF03A	0.957	0.984	T-test Equal Var	0.907		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO04A	REF03A	0.948	0.620	T-test Equal Var	0.991		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	DO05A	REF03A	0.320	0.913	T-test Equal Var	0.998		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	EC04A	REF03A	0.767	0.293	T-test Equal Var	0.969		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	ED03A	REF03A	0.396	0.102	T-test Equal Var	0.400		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	ED04A	REF03A	0.757	0.301	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	ED05A	REF03A	0.314	0.292	T-test Equal Var	0.867		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	MD01A	REF03A	0.721	0.198	T-test Equal Var	0.844		Treatment >= Comparison
Larval Batch 3	Percent Normal Survival	MD02A	REF03A	0.613	0.037	T-test Unequal Var	0.061	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	MD03A	REF03A	0.656	0.625	T-test Equal Var	0.085	Yes	Treatment < Comparison
Larval Batch 3	Percent Normal Survival	WW01A	REF03A	0.543	0.245	T-test Equal Var	0.972		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	RF01A	Control	0.316	0.235	T-test Equal Var	0.983		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	RF02A	Control	0.475	0.674	T-test Equal Var	0.754		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	RF03A	Control	0.542	0.295	T-test Equal Var	0.240		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC01A-U	REF01A	0.132	0.299	T-test Equal Var	0.009	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	EC02A	REF01A	0.350	0.569	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	IE07A	REF01A	0.202	0.377	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	LA02A	REF01A	0.314	0.079	T-test Unequal Var	0.000	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	CO01A	REF01A	0.014	0.202	Mann-Whitney	0.038	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	CO04A	REF01A	0.000	0.285	Mann-Whitney	0.500		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC01A-A	REF01A	0.013	0.163	Mann-Whitney	0.038	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	RL01A	REF01A	0.000	0.335	Mann-Whitney	0.401		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	RL02A	REF01A	0.000	0.356	Mann-Whitney	0.500		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EI02A	REF01A	0.000	0.029	Rankit Unequal Var	0.813		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	CO01A	REF02A	0.184	0.992	T-test Equal Var	0.077	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	CO04A	REF02A	0.053	0.528	T-test Equal Var	0.816		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC01A-A	REF02A	0.180	0.978	T-test Equal Var	0.099	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	EC01A-U	REF02A	0.510	0.811	T-test Equal Var	0.118		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC02A	REF02A	0.408	0.095	T-test Unequal Var	0.022	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	IE07A	REF02A	0.170	0.202	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	LA02A	REF02A	0.230	0.807	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	RL01A	REF02A	0.224	0.007	T-test Unequal Var	0.925		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	RL02A	REF02A	0.117	0.009	T-test Unequal Var	0.934		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EI02A	REF02A	0.046	0.001	Rankit Unequal Var	0.958		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	CO01A	REF03A	0.068	0.530	T-test Equal Var	0.457		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	CO04A	REF03A	0.440	0.220	T-test Equal Var	0.969		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC01A-A	REF03A	0.079	0.490	T-test Equal Var	0.527		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC01A-U	REF03A	0.190	0.416	T-test Equal Var	0.567		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EC02A	REF03A	0.799	0.047	T-test Unequal Var	0.339		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	EI02A	REF03A	0.168	0.003	T-test Unequal Var	0.984		Treatment >= Comparison

Summary of Statistical Comparison with One-Tail Correction

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Batch 4	Percent Normal Survival	IE07A	REF03A	0.672	0.084	T-test Unequal Var	0.020	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	LA02A	REF03A	0.323	0.318	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Batch 4	Percent Normal Survival	RL01A	REF03A	0.514	0.009	T-test Unequal Var	0.980		Treatment >= Comparison
Larval Batch 4	Percent Normal Survival	RL02A	REF03A	0.410	0.010	T-test Unequal Var	0.981		Treatment >= Comparison

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=REF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
result	Reference	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
result	Diff (1-2)		-0.326	-0.099	0.1289	0.1055	0.1561	0.2991

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0552	0	0.2255
result	Reference	0.0818	0	0.3977
result	Diff (1-2)	0.0987		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-1.00	0.3464
result	Satterthwaite	Unequal	7.02	-1.00	0.3503

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.19	0.4651

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=REF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
result	Reference	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
result	Diff (1-2)		-0.441	-0.205	0.0319	0.1096	0.1622	0.3107

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0552	0	0.2255
result	Reference	0.0864	0	0.4636
result	Diff (1-2)	0.1026		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-2.00	0.0811
result	Satterthwaite	Unequal	6.8	-2.00	0.0874

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.45	0.4069

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=REF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
result	Control	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779
result	Reference	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
result	Diff (1-2)		-0.057	0.1287	0.3148	0.0862	0.1276	0.2444

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0588	0	0.3218
result	Reference	0.0552	0	0.2255
result	Diff (1-2)	0.0807		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	1.60	0.1493
result	Satterthwaite	Unequal	7.97	1.60	0.1495

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.13	0.9064

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=REF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779
result	Reference	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
result	Diff (1-2)		-0.331	-0.046	0.2392	0.1321	0.1956	0.3748

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0588	0	0.3218
result	Reference	0.1089	0	0.4636
result	Diff (1-2)	0.1237		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-0.37	0.7192
result	Satterthwaite	Unequal	6.15	-0.37	0.7220

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	3.43	0.2601

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----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=REF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
result	Reference	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
result	Diff (1-2)		-0.264	-0.026	0.2126	0.1104	0.1635	0.3133

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0818	0	0.3977
result	Reference	0.0632	0	0.3977
result	Diff (1-2)	0.1034		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-0.25	0.8089
result	Satterthwaite	Unequal	7.52	-0.25	0.8093

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.68	0.6292

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=REF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
result	Reference	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757
result	Diff (1-2)		-0.328	-0.129	0.0703	0.0922	0.1364	0.2614

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0818	0	0.3977
result	Reference	0.0273	0.2255	0.3977
result	Diff (1-2)	0.0863		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-1.49	0.1742
result	Satterthwaite	Unequal	4.88	-1.49	0.1974

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	8.96	0.0564

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----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=REF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
result	Reference	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542
result	Diff (1-2)		-0.517	-0.307	-0.098	0.0971	0.1437	0.2753

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0818	0	0.3977
result	Reference	0.0396	0.3977	0.6331
result	Diff (1-2)	0.0909		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-3.38	0.0096
result	Satterthwaite	Unequal	5.77	-3.38	0.0157

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	4.28	0.1881

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=REF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0	0	0	.	0	.
result	Reference	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
result	Diff (1-2)		-0.345	-0.17	0.0057	0.0813	0.1203	0.2305

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0	0	0
result	Reference	0.0761	0	0.3977
result	Diff (1-2)	0.0761		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-2.23	0.0562
result	Satterthwaite	Unequal	4	-2.23	0.0895

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	Infty	<.0001

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----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=REF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0	0	0	.	0	.
result	Reference	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209
result	Diff (1-2)		-0.306	-0.155	-0.004	0.07	0.1036	0.1984

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0	0	0
result	Reference	0.0655	0	0.3218
result	Diff (1-2)	0.0655		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-2.36	0.0460
result	Satterthwaite	Unequal	4	-2.36	0.0777

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	Infty	<.0001

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----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
result	Reference	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
result	Diff (1-2)		-0.296	-0.08	0.1373	0.1004	0.1487	0.2848

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0552	0	0.2255
result	Reference	0.0761	0	0.3977
result	Diff (1-2)	0.094		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-0.85	0.4222
result	Satterthwaite	Unequal	7.3	-0.85	0.4245

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.90	0.5502

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=REF01A -----

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	29.50	27.50	4.409586	5.90
Reference	5	25.50	27.50	4.409586	5.10

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 29.5000

Normal Approximation

Z 0.3402

One-Sided Pr > Z 0.3669

Two-Sided Pr > |Z| 0.7337

t Approximation

One-Sided Pr > Z 0.3708

Two-Sided Pr > |Z| 0.7415

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.2057

DF 1

Pr > Chi-Square 0.6501

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=RF01A -----

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	26.50	27.50	4.183300	5.30
Reference	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.

Kruskal-Wallis Test

Chi-Square 0.0571

DF 1

Pr > Chi-Square 0.8111

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=RF02A -----

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	25.0	27.50	4.166667	5.0
Reference	5	30.0	27.50	4.166667	6.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 25.0000

Normal Approximation

Z -0.4800

One-Sided Pr < Z 0.3156

Two-Sided Pr > |Z| 0.6312

t Approximation

One-Sided Pr < Z 0.3213

Two-Sided Pr > |Z| 0.6427

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.3600

DF 1

Pr > Chi-Square 0.5485

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=REF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	Control	5	-0.908	-0.152	0.6045	0.3648	0.6089	1.7498
rankit	Reference	5	-1.142	0.1516	1.4457	0.6244	1.0422	2.9949
rankit	Diff (1-2)		-1.548	-0.303	0.9416	0.5765	0.8535	1.6352

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0.2723	-0.596	0.5154
rankit	Reference	0.4661	-0.596	1.5466
rankit	Diff (1-2)	0.5398		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-0.56	0.5897
rankit	Satterthwaite	Unequal	6.45	-0.56	0.5933

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	2.93	0.3227

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=REF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Std Dev		
rankit	Control	5	-0.596	-0.596	-0.596	.	0	.
rankit	Reference	5	-0.393	0.5963	1.586	0.4775	0.797	2.2904
rankit	Diff (1-2)		-2.015	-1.193	-0.371	0.3807	0.5636	1.0797

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-0.596	-0.596
rankit	Reference	0.3565	-0.596	1.5466
rankit	Diff (1-2)	0.3565		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-3.35	0.0101
rankit	Satterthwaite	Unequal	4	-3.35	0.0287

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.1019	0.3445	0.5872	0.1171	0.1954	0.5615
Result	Diff (1-2)		-0.432	-0.156	0.1205	0.1279	0.1893	0.3627

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0874	0	0.4636
Result	Diff (1-2)	0.1197		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.30	0.2301
Result	Satterthwaite	Unequal	7.97	-1.30	0.2302

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.14	0.9019

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Diff (1-2)		-0.238	0.0192	0.2769	0.1193	0.1767	0.3385

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0761	0	0.3977
Result	Diff (1-2)	0.1118		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.17	0.8675
Result	Satterthwaite	Unequal	7.96	0.17	0.8676

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.16	0.8912

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779
Result	Diff (1-2)		-0.262	-0.03	0.2025	0.1076	0.1593	0.3053

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0588	0	0.3218
Result	Diff (1-2)	0.1008		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.30	0.7742
Result	Satterthwaite	Unequal	7.26	-0.30	0.7749

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.94	0.5377

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.0977	0.4139	0.7301	0.1526	0.2547	0.7318
Result	Diff (1-2)		-0.548	-0.225	0.0985	0.1498	0.2217	0.4248

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.1139	0	0.6847
Result	Diff (1-2)	0.1402		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.60	0.1474
Result	Satterthwaite	Unequal	7.26	-1.60	0.1512

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.94	0.5378

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.2073	0.2984	0.3896	0.044	0.0734	0.211
Result	Diff (1-2)		-0.313	-0.109	0.0939	0.0942	0.1394	0.2671

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0328	0.2255	0.3977
Result	Diff (1-2)	0.0882		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.24	0.2497
Result	Satterthwaite	Unequal	5.26	-1.24	0.2671

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.21	0.1048

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.289	-0.045	0.1986	0.1129	0.1671	0.3201

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1057		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.43	0.6808
Result	Satterthwaite	Unequal	7.69	-0.43	0.6812

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.50	0.7047

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.2916	0.4177	0.5438	0.0608	0.1015	0.2918
Result	Diff (1-2)		-0.445	-0.229	-0.013	0.1	0.148	0.2835

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0454	0.3218	0.5236
Result	Diff (1-2)	0.0936		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.44	0.0403
Result	Satterthwaite	Unequal	6.25	-2.44	0.0486

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.25	0.2803

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.3001	0.4189	0.5377	0.0573	0.0957	0.275
Result	Diff (1-2)		-0.443	-0.23	-0.017	0.0986	0.146	0.2797

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0428	0.3218	0.5796
Result	Diff (1-2)	0.0924		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.49	0.0376
Result	Satterthwaite	Unequal	6.04	-2.49	0.0470

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.66	0.2370

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.289	-0.045	0.1986	0.1129	0.1671	0.3201

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1057		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.43	0.6808
Result	Satterthwaite	Unequal	7.69	-0.43	0.6812

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.50	0.7047

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Test	5	0.2947	0.476	0.6572	0.0875	0.146	0.4195
Result	Diff (1-2)		-0.528	-0.287	-0.046	0.1118	0.1655	0.3171

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0818	0	0.3977
Result	Test	0.0653	0.3218	0.6331
Result	Diff (1-2)	0.1047		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.74	0.0254
Result	Satterthwaite	Unequal	7.62	-2.74	0.0266

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.57	0.6723

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.1823	0.3388	0.4954	0.0755	0.1261	0.3623
Result	Diff (1-2)		-0.318	-0.139	0.0397	0.0828	0.1227	0.235

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0564	0.2255	0.5236
Result	Diff (1-2)	0.0776		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.79	0.1106
Result	Satterthwaite	Unequal	7.97	-1.79	0.1107

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.12	0.9153

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.2073	0.2984	0.3896	0.044	0.0734	0.211
Result	Diff (1-2)		-0.243	-0.099	0.0455	0.0668	0.099	0.1896

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0328	0.2255	0.3977
Result	Diff (1-2)	0.0626		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.58	0.1531
Result	Satterthwaite	Unequal	6.66	-1.58	0.1607

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.63	0.3715

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0428	0.2785	0.5143	0.1138	0.1899	0.5456
Result	Diff (1-2)		-0.31	-0.079	0.1523	0.1071	0.1585	0.3036

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0849	0	0.5236
Result	Diff (1-2)	0.1002		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.79	0.4541
Result	Satterthwaite	Unequal	6.73	-0.79	0.4582

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.54	0.3887

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Diff (1-2)		-0.215	0.0107	0.2359	0.1043	0.1544	0.2958

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0818	0	0.3977
Result	Diff (1-2)	0.0977		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.11	0.9157
Result	Satterthwaite	Unequal	6.87	0.11	0.9162

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.36	0.4262

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.1937	0.3792	0.5647	0.0895	0.1494	0.4293
Result	Diff (1-2)		-0.377	-0.18	0.0175	0.0913	0.1351	0.2589

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0668	0.2255	0.5236
Result	Diff (1-2)	0.0855		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.10	0.0689
Result	Satterthwaite	Unequal	7.62	-2.10	0.0706

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.57	0.6717

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Upper CL	Lower CL	Upper CL
			Mean	Mean	Std Dev	Std Dev
Result	REF01A	5	0.0517	0.3476	0.0714	0.1191
Result	Test	5	-0.081	0.3003	0.0921	0.1537
Result	Diff (1-2)		-0.11	0.2907	0.0929	0.1375

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0687	0	0.3218
Result	Diff (1-2)	0.087		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.04	0.3299
Result	Satterthwaite	Unequal	7.53	1.04	0.3318

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.66	0.6338

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0559	0.2889	0.5219	0.1124	0.1876	0.5392
Result	Diff (1-2)		-0.318	-0.089	0.14	0.1062	0.1572	0.3011

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0839	0	0.5236
Result	Diff (1-2)	0.0994		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.90	0.3955
Result	Satterthwaite	Unequal	6.77	-0.90	0.4001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.48	0.4004

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.062	0.2446	0.5512	0.1479	0.2469	0.7094
Result	Diff (1-2)		-0.328	-0.045	0.2377	0.1309	0.1938	0.3714

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.1104	0	0.5796
Result	Diff (1-2)	0.1226		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.37	0.7233
Result	Satterthwaite	Unequal	5.77	-0.37	0.7268

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.29	0.1871

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.007	0.2512	0.5094	0.1246	0.2079	0.5975
Result	Diff (1-2)		-0.299	-0.052	0.1956	0.1145	0.1695	0.3246

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.093	0	0.5796
Result	Diff (1-2)	0.1072		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.48	0.6432
Result	Satterthwaite	Unequal	6.37	-0.48	0.6464

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.05	0.3061

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0459	0.2493	0.4527	0.0981	0.1638	0.4707
Result	Diff (1-2)		-0.259	-0.05	0.1593	0.0967	0.1432	0.2744

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0733	0	0.3977
Result	Diff (1-2)	0.0906		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.55	0.5987
Result	Satterthwaite	Unequal	7.31	-0.55	0.6001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.89	0.5525

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0306	0.2897	0.5488	0.125	0.2087	0.5996
Result	Diff (1-2)		-0.338	-0.09	0.1577	0.1148	0.1699	0.3255

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0933	0	0.5796
Result	Diff (1-2)	0.1075		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.84	0.4262
Result	Satterthwaite	Unequal	6.36	-0.84	0.4323

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.07	0.3032

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.029	0.1738	0.3768	0.0979	0.1635	0.4697
Result	Diff (1-2)		-0.183	0.0259	0.2344	0.0966	0.143	0.274

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0731	0	0.3218
Result	Diff (1-2)	0.0905		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.29	0.7823
Result	Satterthwaite	Unequal	7.31	0.29	0.7829

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.88	0.5552

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0626	0.3353	0.6079	0.1316	0.2196	0.631
Result	Diff (1-2)		-0.393	-0.136	0.122	0.1193	0.1767	0.3384

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0982	0	0.5236
Result	Diff (1-2)	0.1117		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.21	0.2594
Result	Satterthwaite	Unequal	6.17	-1.21	0.2692

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.40	0.2633

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.063	0.8296	1.7219	0.4306	0.7187	2.0651
Result	Diff (1-2)		-1.381	-0.63	0.1213	0.3479	0.5151	0.9868

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.3214	0	1.5708
Result	Diff (1-2)	0.3258		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.93	0.0892
Result	Satterthwaite	Unequal	4.22	-1.93	0.1216

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	36.39	0.0042

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Diff (1-2)		-0.215	0.0107	0.2359	0.1043	0.1544	0.2958

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0818	0	0.3977
Result	Diff (1-2)	0.0977		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.11	0.9157
Result	Satterthwaite	Unequal	6.87	0.11	0.9162

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.36	0.4262

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0423	0.3675	0.6927	0.1569	0.2619	0.7525
Result	Diff (1-2)		-0.465	-0.168	0.1289	0.1374	0.2034	0.3897

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.1171	0	0.6847
Result	Diff (1-2)	0.1287		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.30	0.2283
Result	Satterthwaite	Unequal	5.59	-1.30	0.2432

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.83	0.1562

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.1986	0.264	0.3295	0.0316	0.0527	0.1515
Result	Diff (1-2)		-0.199	-0.064	0.07	0.0622	0.0921	0.1765

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0236	0.2255	0.3218
Result	Diff (1-2)	0.0583		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.10	0.3015
Result	Satterthwaite	Unequal	5.51	-1.10	0.3153

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.11	0.1432

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.05	0.2022	0.4543	0.1217	0.2031	0.5836
Result	Diff (1-2)		-0.245	-0.003	0.2403	0.1125	0.1665	0.3189

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0908	0	0.4636
Result	Diff (1-2)	0.1053		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.02	0.9815
Result	Satterthwaite	Unequal	6.46	-0.02	0.9816

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.91	0.3262

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Diff (1-2)		-0.215	0.0107	0.2359	0.1043	0.1544	0.2958

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0818	0	0.3977
Result	Diff (1-2)	0.0977		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.11	0.9157
Result	Satterthwaite	Unequal	6.87	0.11	0.9162

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.36	0.4262

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.232	-0.034	0.1627	0.0913	0.1352	0.259

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.0855		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.40	0.6976
Result	Satterthwaite	Unequal	7.62	-0.40	0.6981

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.57	0.6708

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Test	5	0.306	0.3805	0.455	0.036	0.06	0.1725
Result	Diff (1-2)		-0.318	-0.181	-0.043	0.0637	0.0943	0.1807

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0533	0	0.3218
Result	Test	0.0268	0.3218	0.4636
Result	Diff (1-2)	0.0597		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.03	0.0163
Result	Satterthwaite	Unequal	5.91	-3.03	0.0235

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.94	0.2126

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	-0.057	0.1829	0.4229	0.1158	0.1932	0.5553
Result	Diff (1-2)		-0.215	0.0319	0.2788	0.1144	0.1693	0.3243

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.0864	0	0.4636
Result	Diff (1-2)	0.1071		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.30	0.7733
Result	Satterthwaite	Unequal	7.33	0.30	0.7739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.87	0.5597

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----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	-0.08	0.0451	0.1703	0.0604	0.1009	0.2898
Result	Diff (1-2)		-0.009	0.1697	0.3488	0.0829	0.1228	0.2352

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.0451	0	0.2255
Result	Diff (1-2)	0.0777		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.19	0.0603
Result	Satterthwaite	Unequal	7.23	2.19	0.0638

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.96	0.5291

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	0.2252	0.3309	0.4366	0.051	0.0851	0.2446
Result	Diff (1-2)		-0.286	-0.116	0.0541	0.0788	0.1167	0.2235

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.0381	0.2255	0.4636
Result	Diff (1-2)	0.0738		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.57	0.1545
Result	Satterthwaite	Unequal	6.56	-1.57	0.1627

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.76	0.3494

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Diff (1-2)		-0.069	0.1246	0.3182	0.0897	0.1327	0.2543

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.0552	0	0.2255
Result	Diff (1-2)	0.084		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.48	0.1759
Result	Satterthwaite	Unequal	7.86	1.48	0.1766

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.31	0.8000

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	0.0669	0.35	0.6332	0.1366	0.228	0.6552
Result	Diff (1-2)		-0.412	-0.135	0.1415	0.1281	0.1897	0.3634

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.102	0	0.6331
Result	Diff (1-2)	0.12		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.13	0.2925
Result	Satterthwaite	Unequal	6.68	-1.13	0.2987

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.60	0.3769

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----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	-0.057	0.2306	0.5184	0.1389	0.2318	0.6662
Result	Diff (1-2)		-0.296	-0.016	0.2643	0.1297	0.192	0.3678

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.1037	0	0.4636
Result	Diff (1-2)	0.1214		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.13	0.9002
Result	Satterthwaite	Unequal	6.61	-0.13	0.9009

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.69	0.3611

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	0.2481	0.3745	0.5008	0.061	0.1018	0.2924
Result	Diff (1-2)		-0.339	-0.16	0.02	0.0832	0.1232	0.2359

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.0455	0.2255	0.4636
Result	Diff (1-2)	0.0779		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.05	0.0746
Result	Satterthwaite	Unequal	7.27	-2.05	0.0782

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.93	0.5398

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	-0.047	0.2486	0.5443	0.1427	0.2381	0.6843
Result	Diff (1-2)		-0.319	-0.034	0.2518	0.1323	0.1958	0.3751

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.1065	0	0.5236
Result	Diff (1-2)	0.1238		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.27	0.7921
Result	Satterthwaite	Unequal	6.51	-0.27	0.7936

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.84	0.3367

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0393	0.2148	0.3904	0.0847	0.1414	0.4062
Result	Test	5	0.0649	0.2382	0.4114	0.0836	0.1395	0.4009
Result	Diff (1-2)		-0.228	-0.023	0.1815	0.0949	0.1404	0.269

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0632	0	0.3977
Result	Test	0.0624	0	0.3218
Result	Diff (1-2)	0.0888		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.26	0.7997
Result	Satterthwaite	Unequal	8	-0.26	0.7997

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.03	0.9801

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.298	-0.064	0.1692	0.1082	0.1602	0.3068

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1013		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.64	0.5430
Result	Satterthwaite	Unequal	7.87	-0.64	0.5433

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.30	0.8080

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----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC01A A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Diff (1-2)		-0.244	-0.03	0.1843	0.0992	0.1469	0.2814

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0533	0	0.3218
Result	Diff (1-2)	0.0929		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.32	0.7557
Result	Satterthwaite	Unequal	7.16	-0.32	0.7566

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.04	0.5069

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC01A U -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889		
Result	Test	5	-0.031	0.2082	0.4474	0.1154	0.1926	0.5535		
Result	Diff (1-2)		-0.304	-0.038	0.2265	0.1227	0.1817	0.3482		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0861	0	0.3977
Result	Diff (1-2)	0.1149		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.33	0.7463
Result	Satterthwaite	Unequal	7.88	-0.33	0.7464

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.28	0.8160

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	0.0383	0.2625	0.4866	0.1082	0.1805	0.5188
Result	Diff (1-2)		-0.349	-0.093	0.1631	0.1185	0.1754	0.3361

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0807	0	0.4636
Result	Diff (1-2)	0.1109		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.84	0.4275
Result	Satterthwaite	Unequal	7.97	-0.84	0.4276

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.13	0.9113

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209
Result	Diff (1-2)		-0.216	0.0152	0.2467	0.1072	0.1587	0.3041

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0655	0	0.3218
Result	Diff (1-2)	0.1004		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.15	0.8835
Result	Satterthwaite	Unequal	7.83	0.15	0.8836

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.35	0.7784

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	-0.141	0.0795	0.3004	0.1066	0.1779	0.5111
Result	Diff (1-2)		-0.164	0.0902	0.344	0.1176	0.174	0.3334

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0795	0	0.3977
Result	Diff (1-2)	0.1101		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.82	0.4362
Result	Satterthwaite	Unequal	7.98	0.82	0.4363

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.09	0.9337

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209
Result	Diff (1-2)		-0.216	0.0152	0.2467	0.1072	0.1587	0.3041

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0655	0	0.3218
Result	Diff (1-2)	0.1004		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.15	0.8835
Result	Satterthwaite	Unequal	7.83	0.15	0.8836

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.35	0.7784

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----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	-0.114	0.0644	0.243	0.0862	0.1439	0.4135
Result	Diff (1-2)		-0.124	0.1054	0.3352	0.1064	0.1576	0.3019

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0761	0	0.3977
Result	Test	0.0644	0	0.3218
Result	Diff (1-2)	0.0997		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.06	0.3211
Result	Satterthwaite	Unequal	7.79	1.06	0.3220

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.40	0.7531

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA02A -----

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
REF01A	5	26.50	27.50	4.564355	5.30
Test	5	28.50	27.50	4.564355	5.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.5000

Normal Approximation

Z -0.1095

One-Sided Pr < Z 0.4564

Two-Sided Pr > |Z| 0.9128

t Approximation

One-Sided Pr < Z 0.4576

Two-Sided Pr > |Z| 0.9152

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.0480

DF 1

Pr > Chi-Square 0.8266

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT01A -----

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
REF01A	5	20.50	27.50	4.639804	4.10
Test	5	34.50	27.50	4.639804	6.90

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 20.5000

Normal Approximation

Z -1.4009

One-Sided Pr < Z 0.0806

Two-Sided Pr > |Z| 0.1612

t Approximation

One-Sided Pr < Z 0.0974

Two-Sided Pr > |Z| 0.1948

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.2761

DF 1

Pr > Chi-Square 0.1314

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP05A -----

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
REF01A	5	25.50	27.50	4.409586	5.10
Test	5	29.50	27.50	4.409586	5.90

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 25.5000

Normal Approximation

Z -0.3402

One-Sided Pr < Z 0.3669

Two-Sided Pr > |Z| 0.7337

t Approximation

One-Sided Pr < Z 0.3708

Two-Sided Pr > |Z| 0.7415

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.2057

DF 1

Pr > Chi-Square 0.6501

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED04A -----

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
REF01A	5	15.0	27.50	4.579544	3.0
Test	5	40.0	27.50	4.579544	8.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 15.0000

Normal Approximation

Z -2.6203

One-Sided Pr < Z 0.0044

Two-Sided Pr > |Z| 0.0088

t Approximation

One-Sided Pr < Z 0.0139

Two-Sided Pr > |Z| 0.0278

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 7.4503

DF 1

Pr > Chi-Square 0.0063

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=C001A -----

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
REF01A	5	27.0	27.50	4.564355	5.40
Test	5	28.0	27.50	4.564355	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.

Kruskal-Wallis Test

Chi-Square 0.0120

DF 1

Pr > Chi-Square 0.9128

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=LA02A -----

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
REF01A	5	27.50	27.50	4.472136	5.50
Test	5	27.50	27.50	4.472136	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-0.354	0.5963	1.5471	0.4587	0.7657	2.2002
rankit	Test	5	-0.596	-0.596	-0.596	.	0	.
rankit	Diff (1-2)		0.403	1.1927	1.9823	0.3657	0.5414	1.0372

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0.3424	-0.596	1.5466
rankit	Test	0	-0.596	-0.596
rankit	Diff (1-2)	0.3424		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	3.48	0.0083
rankit	Satterthwaite	Unequal	4	3.48	0.0253

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-0.849	0.0652	0.98	0.4414	0.7367	2.1169
rankit	Test	5	-1.409	-0.065	1.2784	0.6484	1.0822	3.1097
rankit	Diff (1-2)		-1.22	0.1305	1.4806	0.6253	0.9257	1.7734

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0.3295	-1.068	1.0005
rankit	Test	0.484	-1.068	1.5466
rankit	Diff (1-2)	0.5855		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	0.22	0.8292
rankit	Satterthwaite	Unequal	7.05	0.22	0.8299

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	2.16	0.4747

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-1.308	-0.74	-0.173	0.2739	0.4571	1.3136
rankit	Test	5	0.7401	0.7401	0.7401	.	0	.
rankit	Diff (1-2)		-1.952	-1.48	-1.009	0.2183	0.3232	0.6193

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0.2044	-1.068	-0.123
rankit	Test	0	0.7401	0.7401
rankit	Diff (1-2)	0.2044		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-7.24	<.0001
rankit	Satterthwaite	Unequal	4	-7.24	0.0019

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Std Dev		
rankit	REF01A	5	-0.791	0.3184	1.4273	0.5351	0.8931	2.5663
rankit	Test	5	-0.318	-0.318	-0.318	.	0	.
rankit	Diff (1-2)		-0.284	0.6368	1.5578	0.4265	0.6315	1.2098

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0.3994	-0.318	1.5466
rankit	Test	0	-0.318	-0.318
rankit	Diff (1-2)	0.3994		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.59	0.1495
rankit	Satterthwaite	Unequal	4	1.59	0.1861

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347		
Result	Test	5	0.1019	0.3445	0.5872	0.1171	0.1954	0.5615		
Result	Diff (1-2)		-0.492	-0.187	0.1167	0.1408	0.2085	0.3995		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0874	0	0.4636
Result	Diff (1-2)	0.1319		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.42	0.1930
Result	Satterthwaite	Unequal	7.88	-1.42	0.1935

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.28	0.8181

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347		
Result	Test	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779		
Result	Diff (1-2)		-0.327	-0.062	0.2033	0.1228	0.1818	0.3482		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0588	0	0.3218
Result	Diff (1-2)	0.115		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.54	0.6053
Result	Satterthwaite	Unequal	6.52	-0.54	0.6085

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.82	0.3392

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347
Result	Test	5	0.0977	0.4139	0.7301	0.1526	0.2547	0.7318
Result	Diff (1-2)		-0.604	-0.257	0.0908	0.161	0.2384	0.4567

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.1139	0	0.6847
Result	Diff (1-2)	0.1508		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.70	0.1268
Result	Satterthwaite	Unequal	7.84	-1.70	0.1276

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.33	0.7892

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347		
Result	Test	5	0.2073	0.2984	0.3896	0.044	0.0734	0.211		
Result	Diff (1-2)		-0.381	-0.141	0.0987	0.1112	0.1646	0.3153		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0328	0.2255	0.3977
Result	Diff (1-2)	0.1041		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.36	0.2115
Result	Satterthwaite	Unequal	4.87	-1.36	0.2339

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	9.04	0.0555

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347		
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296		
Result	Diff (1-2)		-0.352	-0.077	0.198	0.1274	0.1886	0.3613		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1193		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.65	0.5365
Result	Satterthwaite	Unequal	7.03	-0.65	0.5390

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.18	0.4683

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347
Result	Test	5	0.2916	0.4177	0.5438	0.0608	0.1015	0.2918
Result	Diff (1-2)		-0.511	-0.261	-0.01	0.1161	0.1719	0.3293

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0454	0.3218	0.5236
Result	Diff (1-2)	0.1087		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.40	0.0434
Result	Satterthwaite	Unequal	5.62	-2.40	0.0563

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.73	0.1614

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----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347
Result	Test	5	0.3001	0.4189	0.5377	0.0573	0.0957	0.275
Result	Diff (1-2)		-0.51	-0.262	-0.014	0.115	0.1702	0.3261

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0428	0.3218	0.5796
Result	Diff (1-2)	0.1076		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.43	0.0411
Result	Satterthwaite	Unequal	5.45	-2.43	0.0551

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.33	0.1341

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347
Result	Test	5	-0.031	0.2082	0.4474	0.1154	0.1926	0.5535
Result	Diff (1-2)		-0.353	-0.051	0.2511	0.14	0.2072	0.397

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0861	0	0.3977
Result	Diff (1-2)	0.1311		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.39	0.7065
Result	Satterthwaite	Unequal	7.85	-0.39	0.7066

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.31	0.7972

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.117	0.1571	0.4313	0.1323	0.2209	0.6347		
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296		
Result	Diff (1-2)		-0.352	-0.077	0.198	0.1274	0.1886	0.3613		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0988	0	0.4636
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1193		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.65	0.5365
Result	Satterthwaite	Unequal	7.03	-0.65	0.5390

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.18	0.4683

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549		
Result	Test	5	0.0428	0.2785	0.5143	0.1138	0.1899	0.5456		
Result	Diff (1-2)		-0.422	-0.188	0.0453	0.1082	0.1602	0.3068		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0849	0	0.5236
Result	Diff (1-2)	0.1013		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.86	0.1001
Result	Satterthwaite	Unequal	6.87	-1.86	0.1061

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.36	0.4254

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Diff (1-2)		-0.326	-0.099	0.1289	0.1055	0.1561	0.2991

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0818	0	0.3977
Result	Diff (1-2)	0.0987		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.00	0.3464
Result	Satterthwaite	Unequal	7.02	-1.00	0.3503

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.19	0.4651

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.0559	0.2889	0.5219	0.1124	0.1876	0.5392
Result	Diff (1-2)		-0.43	-0.199	0.033	0.1073	0.1588	0.3043

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0839	0	0.5236
Result	Diff (1-2)	0.1005		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.98	0.0833
Result	Satterthwaite	Unequal	6.92	-1.98	0.0890

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.31	0.4379

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	-0.062	0.2446	0.5512	0.1479	0.2469	0.7094
Result	Diff (1-2)		-0.439	-0.154	0.1303	0.1319	0.1952	0.374

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.1104	0	0.5796
Result	Diff (1-2)	0.1235		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.25	0.2463
Result	Satterthwaite	Unequal	5.88	-1.25	0.2584

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.00	0.2084

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.079	0.3142	0.5493	0.1135	0.1894	0.5443
Result	Diff (1-2)		-0.457	-0.224	0.0092	0.108	0.1599	0.3063

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0847	0	0.4636
Result	Diff (1-2)	0.1011		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.21	0.0577
Result	Satterthwaite	Unequal	6.88	-2.21	0.0630

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.35	0.4279

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	-0.007	0.2512	0.5094	0.1246	0.2079	0.5975
Result	Diff (1-2)		-0.41	-0.161	0.0884	0.1155	0.171	0.3276

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.093	0	0.5796
Result	Diff (1-2)	0.1082		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.49	0.1749
Result	Satterthwaite	Unequal	6.51	-1.49	0.1833

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.83	0.3372

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549		
Result	Test	5	0.0459	0.2493	0.4527	0.0981	0.1638	0.4707		
Result	Diff (1-2)		-0.371	-0.159	0.0525	0.098	0.1451	0.2779		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0733	0	0.3977
Result	Diff (1-2)	0.0917		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.73	0.1212
Result	Satterthwaite	Unequal	7.44	-1.73	0.1240

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.76	0.5979

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.0306	0.2897	0.5488	0.125	0.2087	0.5996
Result	Diff (1-2)		-0.45	-0.2	0.0505	0.1158	0.1715	0.3285

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0933	0	0.5796
Result	Diff (1-2)	0.1084		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.84	0.1031
Result	Satterthwaite	Unequal	6.5	-1.84	0.1116

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.85	0.3341

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.0626	0.3353	0.6079	0.1316	0.2196	0.631
Result	Diff (1-2)		-0.505	-0.245	0.0148	0.1203	0.1782	0.3413

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0982	0	0.5236
Result	Diff (1-2)	0.1127		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.18	0.0613
Result	Satterthwaite	Unequal	6.3	-2.18	0.0704

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.16	0.2911

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	-0.063	0.8296	1.7219	0.4306	0.7187	2.0651
Result	Diff (1-2)		-1.491	-0.739	0.0126	0.3483	0.5156	0.9878

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.3214	0	1.5708
Result	Diff (1-2)	0.3261		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.27	0.0531
Result	Satterthwaite	Unequal	4.24	-2.27	0.0823

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	33.85	0.0048

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Diff (1-2)		-0.326	-0.099	0.1289	0.1055	0.1561	0.2991

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0818	0	0.3977
Result	Diff (1-2)	0.0987		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.00	0.3464
Result	Satterthwaite	Unequal	7.02	-1.00	0.3503

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.19	0.4651

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.0423	0.3675	0.6927	0.1569	0.2619	0.7525
Result	Diff (1-2)		-0.576	-0.277	0.0213	0.1383	0.2047	0.3922

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.1171	0	0.6847
Result	Diff (1-2)	0.1295		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.14	0.0646
Result	Satterthwaite	Unequal	5.7	-2.14	0.0784

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.50	0.1746

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.1986	0.264	0.3295	0.0316	0.0527	0.1515
Result	Diff (1-2)		-0.312	-0.174	-0.035	0.0641	0.095	0.1819

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0236	0.2255	0.3218
Result	Diff (1-2)	0.0601		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.89	0.0201
Result	Satterthwaite	Unequal	5.41	-2.89	0.0310

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.49	0.1278

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549		
Result	Test	5	-0.05	0.2022	0.4543	0.1217	0.2031	0.5836		
Result	Diff (1-2)		-0.357	-0.112	0.1331	0.1135	0.1681	0.322		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0908	0	0.4636
Result	Diff (1-2)	0.1063		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.05	0.3229
Result	Satterthwaite	Unequal	6.6	-1.05	0.3292

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.70	0.3588

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779
Result	Diff (1-2)		-0.315	-0.129	0.0574	0.0862	0.1276	0.2444

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0588	0	0.3218
Result	Diff (1-2)	0.0807		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.60	0.1493
Result	Satterthwaite	Unequal	7.97	-1.60	0.1495

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.13	0.9064

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	-0.038	0.189	0.4162	0.1096	0.183	0.5259
Result	Diff (1-2)		-0.326	-0.099	0.1289	0.1055	0.1561	0.2991

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0818	0	0.3977
Result	Diff (1-2)	0.0987		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.00	0.3464
Result	Satterthwaite	Unequal	7.02	-1.00	0.3503

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.19	0.4651

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.344	-0.144	0.0561	0.0926	0.1371	0.2627

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.0867		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.66	0.1357
Result	Satterthwaite	Unequal	7.73	-1.66	0.1370

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.46	0.7205

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.063	0.0902	0.2436	0.074	0.1235	0.3549
Result	Test	5	0.306	0.3805	0.455	0.036	0.06	0.1725
Result	Diff (1-2)		-0.432	-0.29	-0.149	0.0656	0.0971	0.186

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0552	0	0.2255
Result	Test	0.0268	0.3218	0.4636
Result	Diff (1-2)	0.0614		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.73	0.0015
Result	Satterthwaite	Unequal	5.79	-4.73	0.0036

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.24	0.1910

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757
Result	Test	5	-0.057	0.1829	0.4229	0.1158	0.1932	0.5553
Result	Diff (1-2)		-0.074	0.1348	0.3438	0.0968	0.1433	0.2746

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0273	0.2255	0.3977
Result	Test	0.0864	0	0.4636
Result	Diff (1-2)	0.0906		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.49	0.1754
Result	Satterthwaite	Unequal	4.79	1.49	0.1997

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	9.99	0.0466

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757
Result	Test	5	0.2252	0.3309	0.4366	0.051	0.0851	0.2446
Result	Diff (1-2)		-0.121	-0.013	0.0949	0.0501	0.0741	0.142

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0273	0.2255	0.3977
Result	Test	0.0381	0.2255	0.4636
Result	Diff (1-2)	0.0469		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.28	0.7855
Result	Satterthwaite	Unequal	7.26	-0.28	0.7862

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.94	0.5371

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757
Result	Test	5	0.0669	0.35	0.6332	0.1366	0.228	0.6552
Result	Diff (1-2)		-0.276	-0.032	0.2111	0.1128	0.1669	0.3198

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0273	0.2255	0.3977
Result	Test	0.102	0	0.6331
Result	Diff (1-2)	0.1056		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.31	0.7671
Result	Satterthwaite	Unequal	4.57	-0.31	0.7728

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	13.91	0.0258

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757		
Result	Test	5	-0.057	0.2306	0.5184	0.1389	0.2318	0.6662		
Result	Diff (1-2)		-0.16	0.0871	0.3344	0.1145	0.1695	0.3248		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0273	0.2255	0.3977
Result	Test	0.1037	0	0.4636
Result	Diff (1-2)	0.1072		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.81	0.4400
Result	Satterthwaite	Unequal	4.55	0.81	0.4568

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	14.38	0.0243

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757		
Result	Test	5	0.2481	0.3745	0.5008	0.061	0.1018	0.2924		
Result	Diff (1-2)		-0.179	-0.057	0.0657	0.0567	0.0839	0.1608		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0273	0.2255	0.3977
Result	Test	0.0455	0.2255	0.4636
Result	Diff (1-2)	0.0531		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.07	0.3162
Result	Satterthwaite	Unequal	6.55	-1.07	0.3228

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.77	0.3474

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
Result	REF02A	5	0.2418	0.3177	0.3936	0.0366	0.0611	0.1757		
Result	Test	5	-0.047	0.2486	0.5443	0.1427	0.2381	0.6843		
Result	Diff (1-2)		-0.184	0.0691	0.3226	0.1174	0.1738	0.333		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0273	0.2255	0.3977
Result	Test	0.1065	0	0.5236
Result	Diff (1-2)	0.1099		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.63	0.5473
Result	Satterthwaite	Unequal	4.52	0.63	0.5601

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	15.17	0.0220

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----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209		
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296		
Result	Diff (1-2)		-0.295	-0.08	0.1363	0.1	0.148	0.2835		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0655	0	0.3218
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.0936		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.85	0.4201
Result	Satterthwaite	Unequal	8	-0.85	0.4201

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.04	0.9692

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC01A A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209		
Result	Test	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423		
Result	Diff (1-2)		-0.24	-0.045	0.1496	0.0902	0.1335	0.2558		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0655	0	0.3218
Result	Test	0.0533	0	0.3218
Result	Diff (1-2)	0.0844		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.53	0.6077
Result	Satterthwaite	Unequal	7.68	-0.53	0.6083

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.51	0.6989

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209		
Result	Test	5	0.0383	0.2625	0.4866	0.1082	0.1805	0.5188		
Result	Diff (1-2)		-0.348	-0.108	0.1318	0.111	0.1644	0.3149		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0655	0	0.3218
Result	Test	0.0807	0	0.4636
Result	Diff (1-2)	0.104		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.04	0.3296
Result	Satterthwaite	Unequal	7.67	-1.04	0.3309

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.52	0.6950

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209		
Result	Test	5	-0.141	0.0795	0.3004	0.1066	0.1779	0.5111		
Result	Diff (1-2)		-0.163	0.075	0.3126	0.11	0.1629	0.3121		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0655	0	0.3218
Result	Test	0.0795	0	0.3977
Result	Diff (1-2)	0.103		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.73	0.4873
Result	Satterthwaite	Unequal	7.72	0.73	0.4881

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.47	0.7158

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209		
Result	Test	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889		
Result	Diff (1-2)		-0.247	-0.015	0.2163	0.1072	0.1587	0.3041		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0655	0	0.3218
Result	Test	0.0761	0	0.3977
Result	Diff (1-2)	0.1004		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.15	0.8835
Result	Satterthwaite	Unequal	7.83	-0.15	0.8836

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.35	0.7784

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209		
Result	Test	5	-0.114	0.0644	0.243	0.0862	0.1439	0.4135		
Result	Diff (1-2)		-0.122	0.0902	0.3019	0.0981	0.1452	0.2781		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0655	0	0.3218
Result	Test	0.0644	0	0.3218
Result	Diff (1-2)	0.0918		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.98	0.3547
Result	Satterthwaite	Unequal	8	0.98	0.3547

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.04	0.9735

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=EH02A -----

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
REF02A	5	27.0	27.50	4.472136	5.40
Test	5	28.0	27.50	4.472136	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.

Kruskal-Wallis Test

Chi-Square 0.0125

DF 1

Pr > Chi-Square 0.9110

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA06A -----

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
REF02A	5	18.0	27.50	4.669642	3.60
Test	5	37.0	27.50	4.669642	7.40

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 18.0000

Normal Approximation

Z -1.9273

One-Sided Pr < Z 0.0270

Two-Sided Pr > |Z| 0.0539

t Approximation

One-Sided Pr < Z 0.0430

Two-Sided Pr > |Z| 0.0860

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 4.1389

DF 1

Pr > Chi-Square 0.0419

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL01A -----

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
REF02A	5	17.0	27.50	4.579544	3.40
Test	5	38.0	27.50	4.579544	7.60

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 17.0000

Normal Approximation

Z -2.1836

One-Sided Pr < Z 0.0145

Two-Sided Pr > |Z| 0.0290

t Approximation

One-Sided Pr < Z 0.0284

Two-Sided Pr > |Z| 0.0568

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 5.2570

DF 1

Pr > Chi-Square 0.0219

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL06A -----

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
REF02A	5	17.0	27.50	4.564355	3.40
Test	5	38.0	27.50	4.564355	7.60

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 17.0000

Normal Approximation

Z -2.1909

One-Sided Pr < Z 0.0142

Two-Sided Pr > |Z| 0.0285

t Approximation

One-Sided Pr < Z 0.0281

Two-Sided Pr > |Z| 0.0562

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 5.2920

DF 1

Pr > Chi-Square 0.0214

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=C002A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0571

DF 1

Pr > Chi-Square 0.8111

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IE09A -----

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
REF02A	5	23.0	27.50	4.409586	4.60
Test	5	32.0	27.50	4.409586	6.40

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 23.0000

Normal Approximation

Z -0.9071

One-Sided Pr < Z 0.1822

Two-Sided Pr > |Z| 0.3643

t Approximation

One-Sided Pr < Z 0.1940

Two-Sided Pr > |Z| 0.3880

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.0414

DF 1

Pr > Chi-Square 0.3075

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=EC04A -----

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
REF02A	5	39.50	27.50	4.564355	7.90
Test	5	15.50	27.50	4.564355	3.10

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 39.5000

Normal Approximation

Z 2.5195

One-Sided Pr > Z 0.0059

Two-Sided Pr > |Z| 0.0118

t Approximation

One-Sided Pr > Z 0.0164

Two-Sided Pr > |Z| 0.0328

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 6.9120

DF 1

Pr > Chi-Square 0.0086

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED04A -----

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
REF02A	5	15.0	27.50	4.579544	3.0
Test	5	40.0	27.50	4.579544	8.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 15.0000

Normal Approximation

Z -2.6203

One-Sided Pr < Z 0.0044

Two-Sided Pr > |Z| 0.0088

t Approximation

One-Sided Pr < Z 0.0139

Two-Sided Pr > |Z| 0.0278

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 7.4503

DF 1

Pr > Chi-Square 0.0063

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=WW01A -----

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
REF02A	5	32.0	27.50	4.232808	6.40
Test	5	23.0	27.50	4.232808	4.60

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 32.0000

Normal Approximation

Z 0.9450

One-Sided Pr > Z 0.1723

Two-Sided Pr > |Z| 0.3447

t Approximation

One-Sided Pr > Z 0.1847

Two-Sided Pr > |Z| 0.3693

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.1302

DF 1

Pr > Chi-Square 0.2877

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=C001A -----

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
REF02A	5	26.0	27.50	4.518481	5.20
Test	5	29.0	27.50	4.518481	5.80

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.0000

Normal Approximation

Z -0.2213

One-Sided Pr < Z 0.4124

Two-Sided Pr > |Z| 0.8248

t Approximation

One-Sided Pr < Z 0.4149

Two-Sided Pr > |Z| 0.8298

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.1102

DF 1

Pr > Chi-Square 0.7399

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC01A U -----

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
REF02A	5	24.0	27.50	4.564355	4.80
Test	5	31.0	27.50	4.564355	6.20

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 24.0000

Normal Approximation

Z -0.6573

One-Sided Pr < Z 0.2555

Two-Sided Pr > |Z| 0.5110

t Approximation

One-Sided Pr < Z 0.2637

Two-Sided Pr > |Z| 0.5275

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.5880

DF 1

Pr > Chi-Square 0.4432

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EI02A -----

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
REF02A	5	27.50	27.50	4.472136	5.50
Test	5	27.50	27.50	4.472136	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=RL01A -----

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
REF02A	5	27.50	27.50	4.472136	5.50
Test	5	27.50	27.50	4.472136	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.367	-0.641	0.0855	0.3503	0.5847	1.6802
rankit	Test	5	-0.172	0.6405	1.4528	0.3919	0.6542	1.8798
rankit	Diff (1-2)		-2.186	-1.281	-0.376	0.4191	0.6204	1.1886

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.2615	-1.068	46E-18
rankit	Test	0.2926	46E-18	1.5466
rankit	Diff (1-2)	0.3924		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-3.26	0.0114
rankit	Satterthwaite	Unequal	7.9	-3.26	0.0116

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	1.25	0.8330

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-0.764	0.3184	1.4011	0.5224	0.8719	2.5056
rankit	Test	5	-0.318	-0.318	-0.318	.	0	.
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3899	-0.318	1.2736
rankit	Test	0	-0.318	-0.318
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.098	-0.229	0.6409	0.4196	0.7003	2.0124
rankit	Test	5	-0.983	0.2287	1.4399	0.5844	0.9755	2.803
rankit	Diff (1-2)		-1.696	-0.457	0.781	0.5735	0.8491	1.6267

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3132	-0.74	0.5385
rankit	Test	0.4362	-0.74	1.5466
rankit	Diff (1-2)	0.537		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-0.85	0.4192
rankit	Satterthwaite	Unequal	7.26	-0.85	0.4216

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	1.94	0.5367

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-0.044	0.6906	1.4248	0.3543	0.5914	1.6993
rankit	Test	5	-1.331	-0.691	-0.05	0.3092	0.5162	1.4832
rankit	Diff (1-2)		0.5717	1.3811	2.1906	0.3749	0.555	1.0633

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.2645	-0.125	1.5466
rankit	Test	0.2308	-1.068	-0.125
rankit	Diff (1-2)	0.351		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	3.93	0.0043
rankit	Satterthwaite	Unequal	7.86	3.93	0.0045

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	1.31	0.7985

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.345	-0.74	-0.135	0.2918	0.487	1.3993
rankit	Test	5	0.7401	0.7401	0.7401	.	0	.
rankit	Diff (1-2)		-1.982	-1.48	-0.978	0.2326	0.3443	0.6597

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.2178	-1.274	-0.384
rankit	Test	0	0.7401	0.7401
rankit	Diff (1-2)	0.2178		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-6.80	0.0001
rankit	Satterthwaite	Unequal	4	-6.80	0.0024

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-0.58	0.4575	1.4947	0.5004	0.8353	2.4003
rankit	Test	5	-0.458	-0.458	-0.458	.	0	.
rankit	Diff (1-2)		0.0536	0.915	1.7764	0.399	0.5906	1.1315

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3736	-0.458	1.0675
rankit	Test	0	-0.458	-0.458
rankit	Diff (1-2)	0.3736		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	2.45	0.0400
rankit	Satterthwaite	Unequal	4	2.45	0.0705

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554		
Result	Test	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889		
Result	Diff (1-2)		-0.14	0.1252	0.3907	0.123	0.1821	0.3488		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0761	0	0.3977
Result	Diff (1-2)	0.1152		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.09	0.3088
Result	Satterthwaite	Unequal	7.87	1.09	0.3093

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.29	0.8108

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779
Result	Diff (1-2)		-0.165	0.076	0.3171	0.1117	0.1653	0.3167

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0588	0	0.3218
Result	Diff (1-2)	0.1046		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.73	0.4880
Result	Satterthwaite	Unequal	7.05	0.73	0.4907

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.16	0.4739

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.0977	0.4139	0.7301	0.1526	0.2547	0.7318
Result	Diff (1-2)		-0.449	-0.119	0.2107	0.1527	0.2261	0.4331

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.1139	0	0.6847
Result	Diff (1-2)	0.143		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.83	0.4293
Result	Satterthwaite	Unequal	7.46	-0.83	0.4310

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.74	0.6063

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554		
Result	Test	5	0.2073	0.2984	0.3896	0.044	0.0734	0.211		
Result	Diff (1-2)		-0.217	-0.004	0.2097	0.0988	0.1462	0.2801		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0328	0.2255	0.3977
Result	Diff (1-2)	0.0925		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.04	0.9705
Result	Satterthwaite	Unequal	5.13	-0.04	0.9710

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.93	0.0875

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.191	0.0608	0.3128	0.1167	0.1728	0.331

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1093		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.56	0.5931
Result	Satterthwaite	Unequal	7.52	0.56	0.5940

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.67	0.6308

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.2916	0.4177	0.5438	0.0608	0.1015	0.2918
Result	Diff (1-2)		-0.348	-0.123	0.1024	0.1043	0.1544	0.2958

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0454	0.3218	0.5236
Result	Diff (1-2)	0.0976		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.26	0.2441
Result	Satterthwaite	Unequal	6.05	-1.26	0.2550

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.62	0.2402

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.3001	0.4189	0.5377	0.0573	0.0957	0.275
Result	Diff (1-2)		-0.346	-0.124	0.0984	0.103	0.1525	0.2922

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0428	0.3218	0.5796
Result	Diff (1-2)	0.0965		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.29	0.2346
Result	Satterthwaite	Unequal	5.85	-1.29	0.2472

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.08	0.2019

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554		
Result	Test	5	-0.031	0.2082	0.4474	0.1154	0.1926	0.5535		
Result	Diff (1-2)		-0.195	0.0867	0.3681	0.1303	0.193	0.3697		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0861	0	0.3977
Result	Diff (1-2)	0.122		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.71	0.4977
Result	Satterthwaite	Unequal	8	0.71	0.4977

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.01	0.9947

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.191	0.0608	0.3128	0.1167	0.1728	0.331

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1093		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.56	0.5931
Result	Satterthwaite	Unequal	7.52	0.56	0.5940

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.67	0.6308

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0549	0.2949	0.5349	0.1158	0.1933	0.5554
Result	Test	5	0.2947	0.476	0.6572	0.0875	0.146	0.4195
Result	Diff (1-2)		-0.431	-0.181	0.0688	0.1157	0.1713	0.3281

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0864	0	0.4636
Result	Test	0.0653	0.3218	0.6331
Result	Diff (1-2)	0.1083		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.67	0.1332
Result	Satterthwaite	Unequal	7.44	-1.67	0.1360

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.75	0.6000

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.1823	0.3388	0.4954	0.0755	0.1261	0.3623
Result	Diff (1-2)		-0.357	-0.074	0.2089	0.1309	0.1938	0.3713

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0564	0.2255	0.5236
Result	Diff (1-2)	0.1226		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.60	0.5637
Result	Satterthwaite	Unequal	6	-0.60	0.5691

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.73	0.2306

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.2073	0.2984	0.3896	0.044	0.0734	0.211
Result	Diff (1-2)		-0.296	-0.033	0.2287	0.1214	0.1798	0.3444

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0328	0.2255	0.3977
Result	Diff (1-2)	0.1137		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.29	0.7761
Result	Satterthwaite	Unequal	4.72	-0.29	0.7811

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	10.98	0.0395

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.0428	0.2785	0.5143	0.1138	0.1899	0.5456
Result	Diff (1-2)		-0.332	-0.014	0.3048	0.1474	0.2183	0.4182

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0849	0	0.5236
Result	Diff (1-2)	0.1381		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.10	0.9244
Result	Satterthwaite	Unequal	7.55	-0.10	0.9245

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.64	0.6420

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994		
Result	Test	5	-0.081	0.1095	0.3003	0.0921	0.1537	0.4416		
Result	Diff (1-2)		-0.141	0.1555	0.4524	0.1375	0.2036	0.39		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0687	0	0.3218
Result	Diff (1-2)	0.1287		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.21	0.2615
Result	Satterthwaite	Unequal	6.75	1.21	0.2676

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.51	0.3949

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994		
Result	Test	5	0.0559	0.2889	0.5219	0.1124	0.1876	0.5392		
Result	Diff (1-2)		-0.341	-0.024	0.293	0.1468	0.2173	0.4163		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0839	0	0.5236
Result	Diff (1-2)	0.1374		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.17	0.8663
Result	Satterthwaite	Unequal	7.51	-0.17	0.8665

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.68	0.6265

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994		
Result	Test	5	-0.062	0.2446	0.5512	0.1479	0.2469	0.7094		
Result	Diff (1-2)		-0.337	0.0204	0.3779	0.1656	0.2452	0.4697		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.1104	0	0.5796
Result	Diff (1-2)	0.155		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.13	0.8987
Result	Satterthwaite	Unequal	8	0.13	0.8987

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.03	0.9787

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994		
Result	Test	5	-0.007	0.2512	0.5094	0.1246	0.2079	0.5975		
Result	Diff (1-2)		-0.316	0.0138	0.3439	0.1529	0.2264	0.4337		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.093	0	0.5796
Result	Diff (1-2)	0.1432		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.10	0.9258
Result	Satterthwaite	Unequal	7.81	0.10	0.9258

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.37	0.7676

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----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.0306	0.2897	0.5488	0.125	0.2087	0.5996
Result	Diff (1-2)		-0.355	-0.025	0.3059	0.1531	0.2267	0.4343

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0933	0	0.5796
Result	Diff (1-2)	0.1434		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.17	0.8673
Result	Satterthwaite	Unequal	7.82	-0.17	0.8674

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.36	0.7726

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	-0.063	0.8296	1.7219	0.4306	0.7187	2.0651
Result	Diff (1-2)		-1.347	-0.565	0.2179	0.3624	0.5365	1.0279

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.3214	0	1.5708
Result	Diff (1-2)	0.3393		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.66	0.1347
Result	Satterthwaite	Unequal	4.91	-1.66	0.1581

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.72	0.0592

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.0423	0.3675	0.6927	0.1569	0.2619	0.7525
Result	Diff (1-2)		-0.471	-0.103	0.2662	0.1708	0.2528	0.4843

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.1171	0	0.6847
Result	Diff (1-2)	0.1599		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.64	0.5394
Result	Satterthwaite	Unequal	7.96	-0.64	0.5395

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.16	0.8906

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.1986	0.264	0.3295	0.0316	0.0527	0.1515
Result	Diff (1-2)		-0.256	0.001	0.2578	0.1189	0.1761	0.3374

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0236	0.2255	0.3218
Result	Diff (1-2)	0.1114		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.01	0.9931
Result	Satterthwaite	Unequal	4.37	0.01	0.9933

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	21.32	0.0117

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	-0.05	0.2022	0.4543	0.1217	0.2031	0.5836
Result	Diff (1-2)		-0.264	0.0628	0.3897	0.1514	0.2241	0.4294

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0908	0	0.4636
Result	Diff (1-2)	0.1418		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.44	0.6694
Result	Satterthwaite	Unequal	7.75	0.44	0.6698

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.44	0.7341

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.0556	0.2189	0.3822	0.0788	0.1315	0.3779
Result	Diff (1-2)		-0.239	0.0461	0.3314	0.1321	0.1956	0.3748

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0588	0	0.3218
Result	Diff (1-2)	0.1237		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.37	0.7192
Result	Satterthwaite	Unequal	6.15	0.37	0.7220

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.43	0.2601

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.037	0.265	0.5672	0.1458	0.2434	0.6994
Result	Test	5	0.306	0.3805	0.455	0.036	0.06	0.1725
Result	Diff (1-2)		-0.374	-0.116	0.143	0.1197	0.1773	0.3396

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.1089	0	0.4636
Result	Test	0.0268	0.3218	0.4636
Result	Diff (1-2)	0.1121		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.03	0.3330
Result	Satterthwaite	Unequal	4.48	-1.03	0.3552

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	16.45	0.0190

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542		
Result	Test	5	-0.057	0.1829	0.4229	0.1158	0.1932	0.5553		
Result	Diff (1-2)		0.0942	0.3134	0.5326	0.1015	0.1503	0.2879		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.0864	0	0.4636
Result	Diff (1-2)	0.095		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.30	0.0109
Result	Satterthwaite	Unequal	5.61	3.30	0.0182

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.77	0.1593

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542
Result	Test	5	0.2252	0.3309	0.4366	0.051	0.0851	0.2446
Result	Diff (1-2)		0.0388	0.1654	0.292	0.0586	0.0868	0.1663

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.0381	0.2255	0.4636
Result	Diff (1-2)	0.0549		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.01	0.0167
Result	Satterthwaite	Unequal	7.99	3.01	0.0168

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.08	0.9423

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542
Result	Test	5	1.3278	1.5064	1.6851	0.0862	0.1439	0.4135
Result	Diff (1-2)		-1.184	-1.01	-0.836	0.0807	0.1194	0.2288

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.0644	1.249	1.5708
Result	Diff (1-2)	0.0755		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-13.37	<.0001
Result	Satterthwaite	Unequal	6.65	-13.37	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.65	0.3688

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542
Result	Test	5	0.0669	0.35	0.6332	0.1366	0.228	0.6552
Result	Diff (1-2)		-0.106	0.1463	0.3985	0.1168	0.1729	0.3313

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.102	0	0.6331
Result	Diff (1-2)	0.1094		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.34	0.2178
Result	Satterthwaite	Unequal	5.18	1.34	0.2368

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.64	0.0937

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542		
Result	Test	5	-0.057	0.2306	0.5184	0.1389	0.2318	0.6662		
Result	Diff (1-2)		0.0099	0.2658	0.5217	0.1185	0.1755	0.3361		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.1037	0	0.4636
Result	Diff (1-2)	0.111		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.39	0.0435
Result	Satterthwaite	Unequal	5.14	2.39	0.0606

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.87	0.0887

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542		
Result	Test	5	0.2481	0.3745	0.5008	0.061	0.1018	0.2924		
Result	Diff (1-2)		-0.017	0.1219	0.2609	0.0644	0.0953	0.1826		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.0455	0.2255	0.4636
Result	Diff (1-2)	0.0603		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.02	0.0779
Result	Satterthwaite	Unequal	7.85	2.02	0.0786

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.32	0.7928

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542
Result	Test	5	-0.047	0.2486	0.5443	0.1427	0.2381	0.6843
Result	Diff (1-2)		-0.014	0.2477	0.5097	0.1213	0.1796	0.3441

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.1065	0	0.5236
Result	Diff (1-2)	0.1136		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.18	0.0608
Result	Satterthwaite	Unequal	5.08	2.18	0.0802

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.25	0.0811

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3865	0.4963	0.6062	0.053	0.0885	0.2542		
Result	Test	5	0.0649	0.2382	0.4114	0.0836	0.1395	0.4009		
Result	Diff (1-2)		0.0878	0.2582	0.4285	0.0789	0.1168	0.2238		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0396	0.3977	0.6331
Result	Test	0.0624	0	0.3218
Result	Diff (1-2)	0.0739		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.49	0.0081
Result	Satterthwaite	Unequal	6.77	3.49	0.0106

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.49	0.3991

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.029	0.1738	0.3768	0.0979	0.1635	0.4697
Result	Diff (1-2)		-0.147	0.1311	0.409	0.1287	0.1906	0.3651

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0731	0	0.3218
Result	Diff (1-2)	0.1205		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.09	0.3083
Result	Satterthwaite	Unequal	7.48	1.09	0.3104

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.72	0.6128

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	0.0485	0.2341	0.4197	0.0896	0.1495	0.4296
Result	Diff (1-2)		-0.199	0.0708	0.3403	0.1248	0.1847	0.3539

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0669	0	0.3977
Result	Diff (1-2)	0.1168		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.61	0.5612
Result	Satterthwaite	Unequal	7.15	0.61	0.5632

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.05	0.5028

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC01A A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	0.0517	0.1997	0.3476	0.0714	0.1191	0.3423
Result	Diff (1-2)		-0.148	0.1053	0.3581	0.1171	0.1734	0.3321

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0533	0	0.3218
Result	Diff (1-2)	0.1096		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.96	0.3651
Result	Satterthwaite	Unequal	6.26	0.96	0.3726

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.23	0.2819

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC01A U -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.031	0.2082	0.4474	0.1154	0.1926	0.5535
Result	Diff (1-2)		-0.2	0.0967	0.3938	0.1376	0.2037	0.3903

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0861	0	0.3977
Result	Diff (1-2)	0.1288		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.75	0.4745
Result	Satterthwaite	Unequal	7.91	0.75	0.4748

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.24	0.8413

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	0.0383	0.2625	0.4866	0.1082	0.1805	0.5188
Result	Diff (1-2)		-0.247	0.0424	0.3314	0.1338	0.1981	0.3796

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0807	0	0.4636
Result	Diff (1-2)	0.1253		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.34	0.7435
Result	Satterthwaite	Unequal	7.78	0.34	0.7438

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.41	0.7480

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209
Result	Diff (1-2)		-0.117	0.1504	0.418	0.124	0.1835	0.3516

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0655	0	0.3218
Result	Diff (1-2)	0.1161		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.30	0.2313
Result	Satterthwaite	Unequal	7.07	1.30	0.2359

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.14	0.4792

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Upper CL		Lower CL	Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.141	0.0795	0.3004	0.1066	0.1779	0.5111
Result	Diff (1-2)		-0.062	0.2254	0.5126	0.133	0.1969	0.3772

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0795	0	0.3977
Result	Diff (1-2)	0.1245		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.81	0.1079
Result	Satterthwaite	Unequal	7.74	1.81	0.1092

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.45	0.7269

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Diff (1-2)		-0.147	0.1352	0.4173	0.1307	0.1935	0.3706

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0761	0	0.3977
Result	Diff (1-2)	0.1224		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.10	0.3014
Result	Satterthwaite	Unequal	7.61	1.10	0.3030

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.59	0.6660

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.027	0.1546	0.3364	0.0877	0.1465	0.4209
Result	Diff (1-2)		-0.117	0.1504	0.418	0.124	0.1835	0.3516

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0655	0	0.3218
Result	Diff (1-2)	0.1161		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.30	0.2313
Result	Satterthwaite	Unequal	7.07	1.30	0.2359

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.14	0.4792

----- Test=E. estuarius Batch 4 Endpoint=Percent Mortality Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.0389	0.3049	0.571	0.1284	0.2143	0.6157
Result	Test	5	-0.114	0.0644	0.243	0.0862	0.1439	0.4135
Result	Diff (1-2)		-0.026	0.2406	0.5067	0.1233	0.1825	0.3496

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0958	0	0.5796
Result	Test	0.0644	0	0.3218
Result	Diff (1-2)	0.1154		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.08	0.0707
Result	Satterthwaite	Unequal	7	2.08	0.0756

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.22	0.4595

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	1.5708	1.5708	1.5708	.	0	.
Result	Diff (1-2)		-1.577	-1.401	-1.226	0.0813	0.1203	0.2305

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0761	0	0.3977
Result	Test	0	1.5708	1.5708
Result	Diff (1-2)	0.0761		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-18.41	<.0001
Result	Satterthwaite	Unequal	4	-18.41	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Retest Endpoint=Percent Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	-0.042	0.1697	0.381	0.1019	0.1702	0.4889
Result	Test	5	0	0	0	.	0	.
Result	Diff (1-2)		-0.006	0.1697	0.3452	0.0813	0.1203	0.2305

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0761	0	0.3977
Result	Test	0	0	0
Result	Diff (1-2)	0.0761		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.23	0.0562
Result	Satterthwaite	Unequal	4	2.23	0.0895

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 1 Endpoint=Percent Mortality Treatment=BA01A -----

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
REF03A	5	25.50	27.50	4.609772	5.10
Test	5	29.50	27.50	4.609772	5.90

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 25.5000

Normal Approximation

Z -0.3254

One-Sided Pr < Z 0.3724

Two-Sided Pr > |Z| 0.7449

t Approximation

One-Sided Pr < Z 0.3762

Two-Sided Pr > |Z| 0.7523

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.1882

DF 1

Pr > Chi-Square 0.6644

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL04A -----

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
REF03A	5	31.50	27.50	4.609772	6.30
Test	5	23.50	27.50	4.609772	4.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 31.5000

Normal Approximation

Z 0.7593

One-Sided Pr > Z 0.2238

Two-Sided Pr > |Z| 0.4477

t Approximation

One-Sided Pr > Z 0.2336

Two-Sided Pr > |Z| 0.4671

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.7529

DF 1

Pr > Chi-Square 0.3855

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT01A -----

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
REF03A	5	27.0	27.50	4.564355	5.40
Test	5	28.0	27.50	4.564355	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.

Kruskal-Wallis Test

Chi-Square 0.0120

DF 1

Pr > Chi-Square 0.9128

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH02A -----

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
REF03A	5	24.0	27.50	4.579544	4.80
Test	5	31.0	27.50	4.579544	6.20

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 24.0000

Normal Approximation

Z -0.6551

One-Sided Pr < Z 0.2562

Two-Sided Pr > |Z| 0.5124

t Approximation

One-Sided Pr < Z 0.2644

Two-Sided Pr > |Z| 0.5288

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.5841

DF 1

Pr > Chi-Square 0.4447

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH03A -----

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
REF03A	5	29.0	27.50	4.609772	5.80
Test	5	26.0	27.50	4.609772	5.20

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 29.0000

Normal Approximation

Z 0.2169

One-Sided Pr > Z 0.4141

Two-Sided Pr > |Z| 0.8283

t Approximation

One-Sided Pr > Z 0.4166

Two-Sided Pr > |Z| 0.8331

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.1059

DF 1

Pr > Chi-Square 0.7449

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH06A -----

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
REF03A	5	31.50	27.50	4.609772	6.30
Test	5	23.50	27.50	4.609772	4.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 31.5000

Normal Approximation

Z 0.7593

One-Sided Pr > Z 0.2238

Two-Sided Pr > |Z| 0.4477

t Approximation

One-Sided Pr > Z 0.2336

Two-Sided Pr > |Z| 0.4671

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.7529

DF 1

Pr > Chi-Square 0.3855

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=KP06A -----

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
REF03A	5	31.50	27.50	4.609772	6.30
Test	5	23.50	27.50	4.609772	4.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 31.5000

Normal Approximation

Z 0.7593

One-Sided Pr > Z 0.2238

Two-Sided Pr > |Z| 0.4477

t Approximation

One-Sided Pr > Z 0.2336

Two-Sided Pr > |Z| 0.4671

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.7529

DF 1

Pr > Chi-Square 0.3855

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=EC04A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 7.3052

DF 1

Pr > Chi-Square 0.0069

----- Test=E. estuarius Batch 3 Endpoint=Percent Mortality Treatment=ED05A -----

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
REF03A	5	40.0	27.50	4.699291	8.0
Test	5	15.0	27.50	4.699291	3.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5536

One-Sided Pr > Z 0.0053

Two-Sided Pr > |Z| 0.0107

t Approximation

One-Sided Pr > Z 0.0155

Two-Sided Pr > |Z| 0.0310

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 7.0755

DF 1

Pr > Chi-Square 0.0078

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.434	-0.303	0.8272	0.5455	0.9104	2.6162
rankit	Test	5	-0.827	0.3032	1.4337	0.5455	0.9104	2.6162
rankit	Diff (1-2)		-1.934	-0.606	0.7213	0.615	0.9104	1.7442

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.4072	-1.274	0.5154
rankit	Test	0.4072	-0.515	1.2736
rankit	Diff (1-2)	0.5758		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.05	0.3230
rankit	Satterthwaite	Unequal	8	-1.05	0.3230

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	1.00	1.0000

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.302	0.1593	1.6211	0.7054	1.1773	3.383
rankit	Test	5	-0.902	-0.159	0.5837	0.3585	0.5984	1.7196
rankit	Diff (1-2)		-1.043	0.3186	1.6806	0.6308	0.9338	1.789

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.5265	-1.068	1.2736
rankit	Test	0.2676	-1.068	0.3845
rankit	Diff (1-2)	0.5906		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	0.54	0.6042
rankit	Satterthwaite	Unequal	5.94	0.54	0.6092

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	3.87	0.2183

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.088	0.2827	1.6533	0.6614	1.1039		3.172	
rankit	Test	5	-1.001	-0.283	0.4359	0.3467	0.5787		1.663	
rankit	Diff (1-2)		-0.72	0.5654	1.8508	0.5953	0.8813		1.6884	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.4937	-0.895	1.2736
rankit	Test	0.2588	-0.895	0.249
rankit	Diff (1-2)	0.5574		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.01	0.3401
rankit	Satterthwaite	Unequal	6.04	1.01	0.3493

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	3.64	0.2388

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-0.626	0.4575	1.541	0.5228	0.8726	2.5074
rankit	Test	5	-0.458	-0.458	-0.458	.	0	.
rankit	Diff (1-2)		0.0151	0.915	1.8149	0.4168	0.617	1.182

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3902	-0.458	1.2736
rankit	Test	0	-0.458	-0.458
rankit	Diff (1-2)	0.3902		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	2.34	0.0471
rankit	Satterthwaite	Unequal	4	2.34	0.0790

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=E. estuarius Batch 2 Endpoint=Percent Mortality Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	-1.286	0.1855	1.6569	0.71	1.185	3.4051		
rankit	Test	5	-0.913	-0.186	0.5418	0.3509	0.5857	1.6831		
rankit	Diff (1-2)		-0.992	0.371	1.7342	0.6313	0.9347	1.7906		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.5299	-1.068	1.2736
rankit	Test	0.2619	-1.068	0.5154
rankit	Diff (1-2)	0.5911		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	0.63	0.5477
rankit	Satterthwaite	Unequal	5.84	0.63	0.5540

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	4.09	0.2010

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.5862	0.7222	0.8582	0.0656	0.1096	0.3148
result	Reference	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
result	Diff (1-2)		-0.124	0.0407	0.2055	0.0763	0.113	0.2165

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.049	0.6327	0.8798
result	Reference	0.052	0.4906	0.7612
result	Diff (1-2)	0.0715		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.57	0.5850
result	Satterthwaite	Unequal	7.97	0.57	0.5850

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.13	0.9104

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.5862	0.7222	0.8582	0.0656	0.1096	0.3148
result	Reference	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
result	Diff (1-2)		-0.227	0.0093	0.2457	0.1095	0.1621	0.3105

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.049	0.6327	0.8798
result	Reference	0.09	0.5011	0.9311
result	Diff (1-2)	0.1025		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.09	0.9298
result	Satterthwaite	Unequal	6.18	0.09	0.9304

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	3.38	0.2654

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.2929	0.4988	0.7047	0.0993	0.1658	0.4764
result	Reference	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
result	Diff (1-2)		-0.382	-0.147	0.0881	0.1089	0.1612	0.3088

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0741	0.252	0.716
result	Reference	0.07	0.396	0.803
result	Diff (1-2)	0.1019		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-1.44	0.1873
result	Satterthwaite	Unequal	7.97	-1.44	0.1874

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.12	0.9131

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.2929	0.4988	0.7047	0.0993	0.1658	0.4764
result	Reference	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
result	Diff (1-2)		-0.142	0.07	0.282	0.0982	0.1454	0.2785

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0741	0.252	0.716
result	Reference	0.0544	0.296	0.625
result	Diff (1-2)	0.0919		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.76	0.4683
result	Satterthwaite	Unequal	7.34	0.76	0.4702

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.86	0.5624

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.2929	0.4988	0.7047	0.0993	0.1658	0.4764
result	Reference	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
result	Diff (1-2)		-0.161	0.0164	0.1938	0.0821	0.1216	0.233

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0741	0.252	0.716
result	Reference	0.0204	0.42	0.543
result	Diff (1-2)	0.0769		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.21	0.8365
result	Satterthwaite	Unequal	4.6	0.21	0.8403

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	13.15	0.0286

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.6335	0.8154	0.9973	0.0878	0.1465	0.4211
result	Reference	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
result	Diff (1-2)		-0.111	0.0698	0.2502	0.0835	0.1237	0.2369

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0655	0.663	1.016
result	Reference	0.0427	0.675	0.905
result	Diff (1-2)	0.0782		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.89	0.3983
result	Satterthwaite	Unequal	6.88	0.89	0.4023

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.35	0.4274

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.6335	0.8154	0.9973	0.0878	0.1465	0.4211
result	Reference	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
result	Diff (1-2)		-0.229	0.0392	0.3073	0.1242	0.1839	0.3522

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0655	0.663	1.016
result	Reference	0.0961	0.584	1.023
result	Diff (1-2)	0.1163		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.34	0.7447
result	Satterthwaite	Unequal	7.06	0.34	0.7458

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.15	0.4770

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.6335	0.8154	0.9973	0.0878	0.1465	0.4211
result	Reference	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
result	Diff (1-2)		-0.163	0.1322	0.4274	0.1367	0.2024	0.3878

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0655	0.663	1.016
result	Reference	0.11	0.421	1.037
result	Diff (1-2)	0.128		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	1.03	0.3319
result	Satterthwaite	Unequal	6.52	1.03	0.3385

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.82	0.3400

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=RF03A -----

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	32.0	27.50	4.787136	6.40
Reference	5	23.0	27.50	4.787136	4.60

Wilcoxon Two-Sample Test

Statistic 32.0000

Normal Approximation

Z 0.8356

One-Sided Pr > Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr > Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	Control	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Reference	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-6E-17	-6E-17
rankit	Reference	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	Control	5	0.1718	0.1718	0.1718	.	0	.
rankit	Reference	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	0.1718	0.1718
rankit	Reference	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	Control	5	0.1718	0.1718	0.1718	.	0	.
rankit	Reference	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	0.1718	0.1718
rankit	Reference	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	Control	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Reference	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-6E-17	-6E-17
rankit	Reference	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	Control	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Reference	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-6E-17	-6E-17
rankit	Reference	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	Control	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Reference	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-6E-17	-6E-17
rankit	Reference	0	-6E-17	-6E-17
rankit	Diff (1-2)	.	.	.

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	Control	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Reference	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-6E-17	-6E-17
rankit	Reference	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	Control	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Reference	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	-6E-17	-6E-17
rankit	Reference	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	Control	5	0.1718	0.1718	0.1718	.	0	.
rankit	Reference	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	Control	0	0.1718	0.1718
rankit	Reference	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5133	0.7453	0.9773	0.1119	0.1868	0.5369
Result	Diff (1-2)		-0.291	-0.064	0.1632	0.1051	0.1556	0.2982

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0836	0.4788	0.9251
Result	Diff (1-2)	0.0984		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.65	0.5353
Result	Satterthwaite	Unequal	6.7	-0.65	0.5387

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.58	0.3809

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4733	0.6618	0.8502	0.0909	0.1518	0.4361
Result	Diff (1-2)		-0.177	0.0198	0.217	0.0913	0.1352	0.259

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0679	0.4566	0.8834
Result	Diff (1-2)	0.0855		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.23	0.8229
Result	Satterthwaite	Unequal	7.49	0.23	0.8233

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.70	0.6189

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.3508	0.4411	0.5314	0.0436	0.0728	0.2091
Result	Diff (1-2)		0.099	0.2405	0.3819	0.0655	0.097	0.1859

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0325	0.36	0.5384
Result	Diff (1-2)	0.0614		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.92	0.0044
Result	Satterthwaite	Unequal	6.71	3.92	0.0063

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.56	0.3854

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4301	0.5753	0.7204	0.0701	0.1169	0.336
Result	Diff (1-2)		-0.064	0.1063	0.2764	0.0788	0.1166	0.2234

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0523	0.4108	0.709
Result	Diff (1-2)	0.0738		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.44	0.1876
Result	Satterthwaite	Unequal	8	1.44	0.1876

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.01	0.9921

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4015	0.4898	0.578	0.0426	0.0711	0.2042
Result	Diff (1-2)		0.0512	0.1918	0.3323	0.0651	0.0964	0.1847

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0318	0.4178	0.5965
Result	Diff (1-2)	0.061		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.15	0.0137
Result	Satterthwaite	Unequal	6.62	3.15	0.0175

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.68	0.3631

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4322	0.7095	0.9868	0.1338	0.2234	0.6418
Result	Diff (1-2)		-0.288	-0.028	0.2317	0.1203	0.1781	0.3411

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0999	0.4208	1.0163
Result	Diff (1-2)	0.1126		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.25	0.8101
Result	Satterthwaite	Unequal	6.02	-0.25	0.8121

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.69	0.2343

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5468	0.6324	0.7179	0.0413	0.0689	0.1979
Result	Diff (1-2)		-0.09	0.0492	0.1886	0.0646	0.0956	0.1831

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0308	0.5445	0.7083
Result	Diff (1-2)	0.0605		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.81	0.4395
Result	Satterthwaite	Unequal	6.5	0.81	0.4447

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.85	0.3344

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5732	0.7459	0.9186	0.0833	0.1391	0.3996
Result	Diff (1-2)		-0.251	-0.064	0.1226	0.0866	0.1282	0.2456

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0622	0.5433	0.8817
Result	Diff (1-2)	0.0811		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.79	0.4502
Result	Satterthwaite	Unequal	7.76	-0.79	0.4509

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.43	0.7376

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.3509	0.4865	0.6221	0.0654	0.1092	0.3138
Result	Diff (1-2)		0.0305	0.195	0.3596	0.0762	0.1128	0.2161

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0488	0.3701	0.6052
Result	Diff (1-2)	0.0713		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.73	0.0257
Result	Satterthwaite	Unequal	7.97	2.73	0.0258

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.13	0.9054

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4102	0.5433	0.6764	0.0642	0.1072	0.308
Result	Diff (1-2)		-0.025	0.1382	0.3014	0.0756	0.1119	0.2143

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0479	0.4278	0.6687
Result	Diff (1-2)	0.0707		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.95	0.0864
Result	Satterthwaite	Unequal	7.95	1.95	0.0867

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.18	0.8780

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4584	0.7222	0.9859	0.1272	0.2124	0.6103
Result	Diff (1-2)		-0.29	-0.041	0.2091	0.1157	0.1712	0.328

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.095	0.5303	1.0367
Result	Diff (1-2)	0.1083		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.37	0.7174
Result	Satterthwaite	Unequal	6.2	-0.37	0.7202

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.33	0.2703

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5413	0.6607	0.78	0.0576	0.0962	0.2763
Result	Diff (1-2)		-0.135	0.0209	0.1765	0.0721	0.1067	0.2044

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.043	0.5354	0.7616
Result	Diff (1-2)	0.0675		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.31	0.7649
Result	Satterthwaite	Unequal	7.73	0.31	0.7652

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.46	0.7211

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.6731	0.7709	0.8687	0.0472	0.0788	0.2263
Result	Diff (1-2)		-0.234	-0.089	0.0555	0.0671	0.0993	0.1903

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0352	0.6673	0.868
Result	Diff (1-2)	0.0628		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.42	0.1928
Result	Satterthwaite	Unequal	7.03	-1.42	0.1978

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.18	0.4687

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4066	0.5902	0.7737	0.0886	0.1478	0.4248
Result	Diff (1-2)		-0.103	0.0914	0.2854	0.0898	0.133	0.2548

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0661	0.3623	0.7531
Result	Diff (1-2)	0.0841		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.09	0.3091
Result	Satterthwaite	Unequal	7.58	1.09	0.3108

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.62	0.6536

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4401	0.6813	0.9225	0.1164	0.1942	0.5582
Result	Diff (1-2)		-0.233	0.0003	0.2338	0.1081	0.1601	0.3067

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0869	0.377	0.8954
Result	Diff (1-2)	0.1013		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.00	0.9980
Result	Satterthwaite	Unequal	6.54	0.00	0.9980

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.79	0.3445

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5033	0.6936	0.8839	0.0918	0.1533	0.4405
Result	Diff (1-2)		-0.211	-0.012	0.1864	0.0919	0.1361	0.2607

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0686	0.5238	0.8538
Result	Diff (1-2)	0.0861		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.14	0.8921
Result	Satterthwaite	Unequal	7.46	-0.14	0.8923

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.74	0.6060

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4199	0.6778	0.9357	0.1244	0.2077	0.5968
Result	Diff (1-2)		-0.242	0.0038	0.2492	0.1137	0.1683	0.3225

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0929	0.4595	0.8971
Result	Diff (1-2)	0.1065		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.04	0.9727
Result	Satterthwaite	Unequal	6.28	0.04	0.9730

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.19	0.2877

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5181	0.5966	0.675	0.0378	0.0631	0.1815
Result	Diff (1-2)		-0.052	0.085	0.2215	0.0632	0.0936	0.1793

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0282	0.5173	0.6797
Result	Diff (1-2)	0.0592		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.44	0.1890
Result	Satterthwaite	Unequal	6.17	1.44	0.1998

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.39	0.2637

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.5342	0.626	0.7177	0.0443	0.0739	0.2124
Result	Diff (1-2)		-0.087	0.0556	0.1977	0.0658	0.0974	0.1867

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0331	0.51	0.7051
Result	Diff (1-2)	0.0616		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.90	0.3937
Result	Satterthwaite	Unequal	6.78	0.90	0.3982

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.48	0.4011

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.6247	0.7826	0.9406	0.0762	0.1272	0.3655
Result	Diff (1-2)		-0.279	-0.101	0.0767	0.0823	0.1219	0.2335

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0569	0.6559	0.991
Result	Diff (1-2)	0.0771		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.31	0.2261
Result	Satterthwaite	Unequal	7.94	-1.31	0.2264

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.20	0.8666

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.5371	0.6815	0.826	0.0697	0.1163	0.3343
Result	Test	5	0.4128	0.6145	0.8162	0.0973	0.1625	0.4668
Result	Diff (1-2)		-0.139	0.067	0.2731	0.0954	0.1413	0.2707

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.052	0.4906	0.7612
Result	Test	0.0727	0.4883	0.8973
Result	Diff (1-2)	0.0894		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.75	0.4746
Result	Satterthwaite	Unequal	7.25	0.75	0.4767

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.95	0.5335

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.3678	0.691	1.0142	0.156	0.2603	0.748
Result	Diff (1-2)		-0.358	-0.045	0.268	0.1451	0.2148	0.4114

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.1164	0.342	0.95
Result	Diff (1-2)	0.1358		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.33	0.7478
Result	Satterthwaite	Unequal	6.56	-0.33	0.7497

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.77	0.3477

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.3187	0.5246	0.7305	0.0994	0.1659	0.4766
Result	Diff (1-2)		-0.114	0.1212	0.3563	0.1089	0.1612	0.3089

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0742	0.366	0.761
Result	Diff (1-2)	0.102		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.19	0.2687
Result	Satterthwaite	Unequal	7.97	1.19	0.2688

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.12	0.9126

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.2103	0.521	0.8317	0.1499	0.2502	0.719
Result	Diff (1-2)		-0.18	0.1248	0.4291	0.1409	0.2087	0.3998

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.1119	0.198	0.774
Result	Diff (1-2)	0.132		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.95	0.3720
Result	Satterthwaite	Unequal	6.71	0.95	0.3771

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.56	0.3852

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496		
Result	Test	5	0.2314	0.4788	0.7262	0.1194	0.1992	0.5725		
Result	Diff (1-2)		-0.094	0.167	0.4282	0.121	0.1791	0.3431		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0891	0.209	0.714
Result	Diff (1-2)	0.1133		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.47	0.1787
Result	Satterthwaite	Unequal	7.57	1.47	0.1807

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.62	0.6510

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496		
Result	Test	5	0.4399	0.4922	0.5445	0.0252	0.0421	0.121		
Result	Diff (1-2)		-0.013	0.1536	0.3207	0.0774	0.1146	0.2195		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0188	0.428	0.537
Result	Diff (1-2)	0.0725		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.12	0.0668
Result	Satterthwaite	Unequal	4.58	2.12	0.0926

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	13.80	0.0262

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.2578	0.513	0.7682	0.1231	0.2055	0.5906
Result	Diff (1-2)		-0.134	0.1328	0.3992	0.1234	0.1826	0.3499

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0919	0.23	0.741
Result	Diff (1-2)	0.1155		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.15	0.2835
Result	Satterthwaite	Unequal	7.47	1.15	0.2858

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.73	0.6100

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.3095	0.4326	0.5557	0.0594	0.0991	0.2849
Result	Diff (1-2)		0.0222	0.2132	0.4042	0.0885	0.131	0.2509

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0443	0.356	0.593
Result	Diff (1-2)	0.0828		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.57	0.0329
Result	Satterthwaite	Unequal	6.77	2.57	0.0379

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.49	0.3985

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.4561	0.6056	0.7551	0.0721	0.1204	0.3459
Result	Diff (1-2)		-0.163	0.0402	0.2438	0.0943	0.1396	0.2674

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0538	0.488	0.768
Result	Diff (1-2)	0.0883		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.46	0.6609
Result	Satterthwaite	Unequal	7.51	0.46	0.6617

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.69	0.6241

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496		
Result	Test	5	0.0637	0.303	0.5423	0.1155	0.1927	0.5539		
Result	Diff (1-2)		0.0868	0.3428	0.5988	0.1186	0.1755	0.3363		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0862	0.043	0.537
Result	Diff (1-2)	0.111		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.09	0.0149
Result	Satterthwaite	Unequal	7.68	3.09	0.0157

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.52	0.6958

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.4628	0.5716	0.6804	0.0525	0.0876	0.2518
Result	Diff (1-2)		-0.111	0.0742	0.2591	0.0856	0.1268	0.2429

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0392	0.468	0.699
Result	Diff (1-2)	0.0802		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.93	0.3819
Result	Satterthwaite	Unequal	6.28	0.93	0.3890

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.19	0.2876

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496		
Result	Test	5	0.4088	0.5764	0.744	0.0809	0.135	0.3879		
Result	Diff (1-2)		-0.144	0.0694	0.2825	0.0987	0.1461	0.2799		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0604	0.367	0.698
Result	Diff (1-2)	0.0924		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.75	0.4741
Result	Satterthwaite	Unequal	7.83	0.75	0.4746

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.34	0.7818

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.2179	0.523	0.8281	0.1472	0.2457	0.706
Result	Diff (1-2)		-0.178	0.1228	0.4232	0.1391	0.206	0.3946

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.1099	0.26	0.903
Result	Diff (1-2)	0.1303		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.94	0.3734
Result	Satterthwaite	Unequal	6.79	0.94	0.3782

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.47	0.4033

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.318	0.4692	0.6204	0.073	0.1218	0.35
Result	Diff (1-2)		-0.028	0.1766	0.3811	0.0947	0.1402	0.2686

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0545	0.297	0.623
Result	Diff (1-2)	0.0887		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.99	0.0816
Result	Satterthwaite	Unequal	7.55	1.99	0.0837

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.65	0.6395

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496		
Result	Test	5	0.421	0.5872	0.7534	0.0802	0.1338	0.3846		
Result	Diff (1-2)		-0.154	0.0586	0.2709	0.0983	0.1456	0.2789		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0599	0.462	0.748
Result	Diff (1-2)	0.0921		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.64	0.5423
Result	Satterthwaite	Unequal	7.81	0.64	0.5427

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.37	0.7696

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.272	0.4388	0.6056	0.0805	0.1344	0.3861
Result	Diff (1-2)		-0.006	0.207	0.4197	0.0985	0.1458	0.2794

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0601	0.239	0.58
Result	Diff (1-2)	0.0922		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.24	0.0550
Result	Satterthwaite	Unequal	7.82	2.24	0.0558

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.36	0.7752

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496		
Result	Test	5	0.2266	0.4524	0.6782	0.1089	0.1818	0.5225		
Result	Diff (1-2)		-0.054	0.1934	0.4408	0.1146	0.1696	0.3249		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0813	0.284	0.696
Result	Diff (1-2)	0.1073		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.80	0.1091
Result	Satterthwaite	Unequal	7.83	1.80	0.1099

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.35	0.7779

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.4094	0.598	0.7866	0.091	0.1519	0.4364
Result	Diff (1-2)		-0.177	0.0478	0.2726	0.1041	0.1542	0.2954

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0679	0.366	0.787
Result	Diff (1-2)	0.0975		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.49	0.6371
Result	Satterthwaite	Unequal	7.99	0.49	0.6371

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.06	0.9555

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.272	0.5228	0.7736	0.121	0.202	0.5804
Result	Diff (1-2)		-0.14	0.123	0.3865	0.122	0.1806	0.3461

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0903	0.202	0.751
Result	Diff (1-2)	0.1143		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.08	0.3131
Result	Satterthwaite	Unequal	7.53	1.08	0.3150

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.67	0.6328

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.4515	0.6458	0.8401	0.0937	0.1564	0.4496
Result	Test	5	0.3214	0.4926	0.6638	0.0826	0.1378	0.3961
Result	Diff (1-2)		-0.062	0.1532	0.3682	0.0996	0.1474	0.2825

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.07	0.396	0.803
Result	Test	0.0616	0.299	0.667
Result	Diff (1-2)	0.0932		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.64	0.1390
Result	Satterthwaite	Unequal	7.88	1.64	0.1396

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.29	0.8121

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.6286	0.7256	0.8226	0.0468	0.0781	0.2246
Result	Diff (1-2)		-0.107	0.02	0.1473	0.0589	0.0873	0.1672

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.0349	0.633	0.824
Result	Diff (1-2)	0.0552		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.36	0.7264
Result	Satterthwaite	Unequal	7.7	0.36	0.7268

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.49	0.7070

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.6683	0.745	0.8217	0.037	0.0618	0.1775
Result	Diff (1-2)		-0.117	0.0006	0.1179	0.0543	0.0804	0.1541

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.0276	0.647	0.808
Result	Diff (1-2)	0.0509		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.01	0.9909
Result	Satterthwaite	Unequal	6.85	0.01	0.9909

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.39	0.4194

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC01A Acclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.5732	0.7038	0.8344	0.063	0.1051	0.3021
Result	Diff (1-2)		-0.105	0.0418	0.1883	0.0678	0.1004	0.1924

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.047	0.557	0.813
Result	Diff (1-2)	0.0635		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.66	0.5290
Result	Satterthwaite	Unequal	7.93	0.66	0.5292

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.21	0.8567

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.5994	0.799	0.9986	0.0963	0.1607	0.4619
Result	Diff (1-2)		-0.246	-0.053	0.1394	0.0893	0.1322	0.2533

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.0719	0.618	1.002
Result	Diff (1-2)	0.0836		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.64	0.5409
Result	Satterthwaite	Unequal	6.51	-0.64	0.5449

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.83	0.3374

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.7508	0.893	1.0352	0.0686	0.1145	0.3291
Result	Diff (1-2)		-0.301	-0.147	0.0064	0.0712	0.1055	0.202

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.0512	0.761	1.061
Result	Diff (1-2)	0.0667		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.21	0.0581
Result	Satterthwaite	Unequal	7.75	-2.21	0.0591

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.44	0.7333

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.7394	0.7866	0.8338	0.0228	0.038	0.1092
Result	Diff (1-2)		-0.147	-0.041	0.065	0.0491	0.0727	0.1392

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.017	0.753	0.851
Result	Diff (1-2)	0.046		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.89	0.3985
Result	Satterthwaite	Unequal	5.24	-0.89	0.4116

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.32	0.1019

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.8545	0.9622	1.0699	0.052	0.0867	0.2492
Result	Diff (1-2)		-0.35	-0.217	-0.084	0.0616	0.0912	0.1748

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.0388	0.839	1.07
Result	Diff (1-2)	0.0577		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.75	0.0056
Result	Satterthwaite	Unequal	7.93	-3.75	0.0057

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.21	0.8561

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.627	0.7456	0.8642	0.0572	0.0955	0.2744
Result	Test	5	0.82	0.9024	0.9848	0.0398	0.0664	0.1908
Result	Diff (1-2)		-0.277	-0.157	-0.037	0.0556	0.0822	0.1576

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0427	0.675	0.905
Result	Test	0.0297	0.823	0.957
Result	Diff (1-2)	0.052		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.01	0.0167
Result	Satterthwaite	Unequal	7.13	-3.01	0.0191

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.07	0.4985

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT01A -----

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
REF01A	5	32.0	27.50	4.787136	6.40
Test	5	23.0	27.50	4.787136	4.60

Wilcoxon Two-Sample Test

Statistic 32.0000

Normal Approximation

Z 0.8356

One-Sided Pr > Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr > Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE04A -----

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
REF01A	5	30.0	27.50	4.787136	6.0
Test	5	25.0	27.50	4.787136	5.0

Wilcoxon Two-Sample Test

Statistic 30.0000

Normal Approximation

Z 0.4178

One-Sided Pr > Z 0.3381

Two-Sided Pr > |Z| 0.6761

t Approximation

One-Sided Pr > Z 0.3429

Two-Sided Pr > |Z| 0.6859

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.2727

DF 1

Pr > Chi-Square 0.6015

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=KP05A -----

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
REF01A	5	32.0	27.50	4.787136	6.40
Test	5	23.0	27.50	4.787136	4.60

Wilcoxon Two-Sample Test

Statistic 32.0000

Normal Approximation

Z 0.8356

One-Sided Pr > Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr > Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA02A -----

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
REF01A	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.

Kruskal-Wallis Test

Chi-Square 6.8182

DF 1

Pr > Chi-Square 0.0090

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D005A -----

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
REF01A	5	36.0	27.50	4.772607	7.20
Test	5	19.0	27.50	4.772607	3.80

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 36.0000

Normal Approximation

Z 1.6762

One-Sided Pr > Z 0.0468

Two-Sided Pr > |Z| 0.0937

t Approximation

One-Sided Pr > Z 0.0640

Two-Sided Pr > |Z| 0.1280

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.1720

DF 1

Pr > Chi-Square 0.0749

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MA01A -----

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
REF01A	5	25.0	27.50	4.787136	5.0
Test	5	30.0	27.50	4.787136	6.0

Wilcoxon Two-Sample Test

Statistic 25.0000

Normal Approximation

Z -0.4178

One-Sided Pr < Z 0.3381

Two-Sided Pr > |Z| 0.6761

t Approximation

One-Sided Pr < Z 0.3429

Two-Sided Pr > |Z| 0.6859

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.2727

DF 1

Pr > Chi-Square 0.6015

----- Test=Neanthes UV Batch Endpoint=Individual Growth Treatment=EC01A Unacclimated -----

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
REF01A	5	36.0	27.50	4.787136	7.20
Test	5	19.0	27.50	4.787136	3.80

Wilcoxon Two-Sample Test

Statistic 36.0000

Normal Approximation

Z 1.6711

One-Sided Pr > Z 0.0473

Two-Sided Pr > |Z| 0.0947

t Approximation

One-Sided Pr > Z 0.0645

Two-Sided Pr > |Z| 0.1290

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.1527

DF 1

Pr > Chi-Square 0.0758

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=IE07A -----

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
REF01A	5	26.50	27.50	4.772607	5.30
Test	5	28.50	27.50	4.772607	5.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.5000

Normal Approximation

Z -0.1048

One-Sided Pr < Z 0.4583

Two-Sided Pr > |Z| 0.9166

t Approximation

One-Sided Pr < Z 0.4594

Two-Sided Pr > |Z| 0.9189

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.0439

DF 1

Pr > Chi-Square 0.8340

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.3184	0.3184	0.3184	.	0	.	.	
rankit	Test	5	-1.401	-0.318	0.7643	0.5224	0.8719	2.5056		
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.3184	0.3184
rankit	Test	0.3899	-1.274	0.3184
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.3184	0.3184	0.3184	.	0	.
rankit	Test	5	-1.401	-0.318	0.7643	0.5224	0.8719	2.5056
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.3184	0.3184
rankit	Test	0.3899	-1.274	0.3184
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.3184	0.3184	0.3184	.	0	.	.	
rankit	Test	5	-1.401	-0.318	0.7643	0.5224	0.8719	2.5056		
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.3184	0.3184
rankit	Test	0.3899	-1.274	0.3184
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.3184	0.3184	0.3184	.	0	.	.	
rankit	Test	5	-1.401	-0.318	0.7643	0.5224	0.8719	2.5056		
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.3184	0.3184
rankit	Test	0.3899	-1.274	0.3184
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC01A Acclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC01A Unacclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF01A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	0.3184	0.3184	0.3184	.	0	.	.	
rankit	Test	5	-1.401	-0.318	0.7643	0.5224	0.8719	2.5056		
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	0.3184	0.3184
rankit	Test	0.3899	-1.274	0.3184
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF01A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5133	0.7453	0.9773	0.1119	0.1868	0.5369
Result	Diff (1-2)		-0.316	-0.032	0.2509	0.1312	0.1942	0.3721

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0836	0.4788	0.9251
Result	Diff (1-2)	0.1228		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.26	0.7985
Result	Satterthwaite	Unequal	7.96	-0.26	0.7986

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.16	0.8883

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4733	0.6618	0.8502	0.0909	0.1518	0.4361
Result	Diff (1-2)		-0.209	0.0511	0.3112	0.1204	0.1783	0.3416

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0679	0.4566	0.8834
Result	Diff (1-2)	0.1128		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.45	0.6623
Result	Satterthwaite	Unequal	7.44	0.45	0.6632

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.76	0.5975

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.3508	0.4411	0.5314	0.0436	0.0728	0.2091
Result	Diff (1-2)		0.051	0.2718	0.4926	0.1023	0.1514	0.29

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0325	0.36	0.5384
Result	Diff (1-2)	0.0957		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.84	0.0219
Result	Satterthwaite	Unequal	5.03	2.84	0.0361

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.66	0.0739

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4301	0.5753	0.7204	0.0701	0.1169	0.336
Result	Diff (1-2)		-0.102	0.1376	0.3778	0.1112	0.1646	0.3154

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0523	0.4108	0.709
Result	Diff (1-2)	0.1041		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.32	0.2228
Result	Satterthwaite	Unequal	6.42	1.32	0.2314

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.96	0.3175

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4015	0.4898	0.578	0.0426	0.0711	0.2042
Result	Diff (1-2)		0.0029	0.2231	0.4433	0.102	0.151	0.2893

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0318	0.4178	0.5965
Result	Diff (1-2)	0.0955		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.34	0.0477
Result	Satterthwaite	Unequal	4.98	2.34	0.0669

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.02	0.0682

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4322	0.7095	0.9868	0.1338	0.2234	0.6418
Result	Diff (1-2)		-0.307	0.0034	0.3135	0.1436	0.2126	0.4074

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0999	0.4208	1.0163
Result	Diff (1-2)	0.1345		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.03	0.9806
Result	Satterthwaite	Unequal	7.92	0.03	0.9806

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.23	0.8455

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5468	0.6324	0.7179	0.0413	0.0689	0.1979
Result	Diff (1-2)		-0.139	0.0805	0.3	0.1016	0.1505	0.2883

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0308	0.5445	0.7083
Result	Diff (1-2)	0.0952		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.85	0.4221
Result	Satterthwaite	Unequal	4.92	0.85	0.4367

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.54	0.0613

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786		
Result	Test	5	0.5314	0.6448	0.7581	0.0547	0.0913	0.2622		
Result	Diff (1-2)		-0.16	0.0681	0.2961	0.1056	0.1563	0.2995		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0408	0.5034	0.7346
Result	Diff (1-2)	0.0989		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.69	0.5103
Result	Satterthwaite	Unequal	5.58	0.69	0.5184

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.87	0.1545

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5732	0.7459	0.9186	0.0833	0.1391	0.3996
Result	Diff (1-2)		-0.285	-0.033	0.2193	0.1169	0.173	0.3315

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0622	0.5433	0.8817
Result	Diff (1-2)	0.1094		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.30	0.7706
Result	Satterthwaite	Unequal	7.11	-0.30	0.7715

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.10	0.4912

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.3509	0.4865	0.6221	0.0654	0.1092	0.3138
Result	Diff (1-2)		-0.01	0.2264	0.4626	0.1094	0.162	0.3103

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0488	0.3701	0.6052
Result	Diff (1-2)	0.1024		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.21	0.0581
Result	Satterthwaite	Unequal	6.17	2.21	0.0680

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.40	0.2630

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4102	0.5433	0.6764	0.0642	0.1072	0.308
Result	Diff (1-2)		-0.066	0.1696	0.4048	0.1089	0.1613	0.309

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0479	0.4278	0.6687
Result	Diff (1-2)	0.102		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.66	0.1350
Result	Satterthwaite	Unequal	6.1	1.66	0.1467

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.53	0.2496

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4584	0.7222	0.9859	0.1272	0.2124	0.6103
Result	Diff (1-2)		-0.311	-0.009	0.2925	0.1398	0.2069	0.3965

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.095	0.5303	1.0367
Result	Diff (1-2)	0.1309		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.07	0.9453
Result	Satterthwaite	Unequal	7.98	-0.07	0.9453

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.11	0.9201

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5283	0.6685	0.8086	0.0676	0.1129	0.3244
Result	Diff (1-2)		-0.194	0.0444	0.2825	0.1102	0.1632	0.3127

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0505	0.4898	0.7844
Result	Diff (1-2)	0.1032		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.43	0.6785
Result	Satterthwaite	Unequal	6.29	0.43	0.6815

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.18	0.2885

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5413	0.6607	0.78	0.0576	0.0962	0.2763
Result	Diff (1-2)		-0.178	0.0522	0.2823	0.1066	0.1578	0.3023

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.043	0.5354	0.7616
Result	Diff (1-2)	0.0998		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.52	0.6149
Result	Satterthwaite	Unequal	5.73	0.52	0.6203

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.38	0.1813

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.6731	0.7709	0.8687	0.0472	0.0788	0.2263
Result	Diff (1-2)		-0.281	-0.058	0.165	0.1033	0.1529	0.2929

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0352	0.6673	0.868
Result	Diff (1-2)	0.0967		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.60	0.5652
Result	Satterthwaite	Unequal	5.2	-0.60	0.5738

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.53	0.0963

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4066	0.5902	0.7737	0.0886	0.1478	0.4248
Result	Diff (1-2)		-0.135	0.1227	0.3803	0.1193	0.1766	0.3384

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0661	0.3623	0.7531
Result	Diff (1-2)	0.1117		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.10	0.3040
Result	Satterthwaite	Unequal	7.34	1.10	0.3068

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.85	0.5642

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4401	0.6813	0.9225	0.1164	0.1942	0.5582
Result	Diff (1-2)		-0.257	0.0316	0.3201	0.1336	0.1978	0.379

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0869	0.377	0.8954
Result	Diff (1-2)	0.1251		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.25	0.8070
Result	Satterthwaite	Unequal	7.99	0.25	0.8070

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.07	0.9462

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5033	0.6936	0.8839	0.0918	0.1533	0.4405
Result	Diff (1-2)		-0.242	0.0193	0.2803	0.1209	0.1789	0.3428

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0686	0.5238	0.8538
Result	Diff (1-2)	0.1132		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.17	0.8689
Result	Satterthwaite	Unequal	7.47	0.17	0.8692

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.73	0.6102

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5175	0.6356	0.7537	0.057	0.0951	0.2733
Result	Diff (1-2)		-0.152	0.0773	0.3069	0.1064	0.1575	0.3016

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0425	0.4943	0.7284
Result	Diff (1-2)	0.0996		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.78	0.4602
Result	Satterthwaite	Unequal	5.7	0.78	0.4688

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.48	0.1753

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5181	0.5966	0.675	0.0378	0.0631	0.1815
Result	Diff (1-2)		-0.101	0.1163	0.3339	0.1008	0.1492	0.2859

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0282	0.5173	0.6797
Result	Diff (1-2)	0.0944		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.23	0.2527
Result	Satterthwaite	Unequal	4.78	1.23	0.2749

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	10.17	0.0453

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.2484	0.3799	0.5114	0.0635	0.1059	0.3044
Result	Diff (1-2)		0.0984	0.333	0.5676	0.1087	0.1609	0.3082

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0474	0.2454	0.4781
Result	Diff (1-2)	0.1017		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.27	0.0113
Result	Satterthwaite	Unequal	6.06	3.27	0.0167

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.61	0.2411

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.5342	0.626	0.7177	0.0443	0.0739	0.2124
Result	Diff (1-2)		-0.134	0.0869	0.3081	0.1024	0.1517	0.2905

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0331	0.51	0.7051
Result	Diff (1-2)	0.0959		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.91	0.3914
Result	Satterthwaite	Unequal	5.06	0.91	0.4060

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.42	0.0779

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786		
Result	Test	5	0.6247	0.7826	0.9406	0.0762	0.1272	0.3655		
Result	Diff (1-2)		-0.315	-0.07	0.1759	0.1137	0.1684	0.3226		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0569	0.6559	0.991
Result	Diff (1-2)	0.1065		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.65	0.5309
Result	Satterthwaite	Unequal	6.75	-0.65	0.5342

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.51	0.3954

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.4629	0.7129	0.9629	0.1206	0.2013	0.5786
Result	Test	5	0.4128	0.6145	0.8162	0.0973	0.1625	0.4668
Result	Diff (1-2)		-0.168	0.0984	0.3652	0.1236	0.1829	0.3505

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.09	0.5011	0.9311
Result	Test	0.0727	0.4883	0.8973
Result	Diff (1-2)	0.1157		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.85	0.4199
Result	Satterthwaite	Unequal	7.66	0.85	0.4209

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.54	0.6877

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.3678	0.691	1.0142	0.156	0.2603	0.748
Result	Diff (1-2)		-0.558	-0.262	0.0341	0.1372	0.2032	0.3892

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.1164	0.342	0.95
Result	Diff (1-2)	0.1285		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.04	0.0756
Result	Satterthwaite	Unequal	5.67	-2.04	0.0901

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.59	0.1693

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.3187	0.5246	0.7305	0.0994	0.1659	0.4766
Result	Diff (1-2)		-0.308	-0.096	0.1163	0.0982	0.1454	0.2786

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0742	0.366	0.761
Result	Diff (1-2)	0.092		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.04	0.3280
Result	Satterthwaite	Unequal	7.34	-1.04	0.3306

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.86	0.5620

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.2103	0.521	0.8317	0.1499	0.2502	0.719
Result	Diff (1-2)		-0.379	-0.092	0.1947	0.1329	0.1967	0.3768

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.1119	0.198	0.774
Result	Diff (1-2)	0.1244		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.74	0.4798
Result	Satterthwaite	Unequal	5.79	-0.74	0.4876

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.24	0.1909

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.2314	0.4788	0.7262	0.1194	0.1992	0.5725
Result	Diff (1-2)		-0.291	-0.05	0.1907	0.1115	0.165	0.3161

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0891	0.209	0.714
Result	Diff (1-2)	0.1044		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.48	0.6447
Result	Satterthwaite	Unequal	6.62	-0.48	0.6473

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.69	0.3617

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.2216	0.4086	0.5956	0.0902	0.1506	0.4327
Result	Diff (1-2)		-0.179	0.0202	0.2198	0.0924	0.1368	0.2621

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0673	0.14	0.495
Result	Diff (1-2)	0.0865		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.23	0.8213
Result	Satterthwaite	Unequal	7.66	0.23	0.8216

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.53	0.6884

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.4399	0.4922	0.5445	0.0252	0.0421	0.121
Result	Diff (1-2)		-0.196	-0.063	0.0693	0.0614	0.091	0.1743

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0188	0.428	0.537
Result	Diff (1-2)	0.0575		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.10	0.3025
Result	Satterthwaite	Unequal	4.95	-1.10	0.3212

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.33	0.0640

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.2578	0.513	0.7682	0.1231	0.2055	0.5906
Result	Diff (1-2)		-0.33	-0.084	0.162	0.114	0.1688	0.3235

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0919	0.23	0.741
Result	Diff (1-2)	0.1068		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.79	0.4531
Result	Satterthwaite	Unequal	6.49	-0.79	0.4582

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.86	0.3333

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.3095	0.4326	0.5557	0.0594	0.0991	0.2849
Result	Diff (1-2)		-0.166	-0.004	0.158	0.0749	0.1109	0.2125

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0443	0.356	0.593
Result	Diff (1-2)	0.0701		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.05	0.9581
Result	Satterthwaite	Unequal	7.69	-0.05	0.9582

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.50	0.7025

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.4561	0.6056	0.7551	0.0721	0.1204	0.3459
Result	Diff (1-2)		-0.353	-0.177	-38E-5	0.0817	0.121	0.2317

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0538	0.488	0.768
Result	Diff (1-2)	0.0765		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.31	0.0496
Result	Satterthwaite	Unequal	8	-2.31	0.0496

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.02	0.9854

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.0637	0.303	0.5423	0.1155	0.1927	0.5539
Result	Diff (1-2)		-0.109	0.1258	0.3608	0.1088	0.1611	0.3087

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0862	0.043	0.537
Result	Diff (1-2)	0.1019		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.23	0.2521
Result	Satterthwaite	Unequal	6.75	1.23	0.2583

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.51	0.3936

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.4628	0.5716	0.6804	0.0525	0.0876	0.2518
Result	Diff (1-2)		-0.297	-0.143	0.0117	0.0716	0.106	0.203

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0392	0.468	0.699
Result	Diff (1-2)	0.067		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.13	0.0657
Result	Satterthwaite	Unequal	7.27	-2.13	0.0691

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.92	0.5415

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.4088	0.5764	0.744	0.0809	0.135	0.3879
Result	Diff (1-2)		-0.335	-0.148	0.0397	0.0868	0.1284	0.2461

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0604	0.367	0.698
Result	Diff (1-2)	0.0812		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.82	0.1067
Result	Satterthwaite	Unequal	7.91	-1.82	0.1072

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.23	0.8440

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.2179	0.523	0.8281	0.1472	0.2457	0.706
Result	Diff (1-2)		-0.377	-0.094	0.1885	0.1309	0.1938	0.3713

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.1099	0.26	0.903
Result	Diff (1-2)	0.1226		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.77	0.4643
Result	Satterthwaite	Unequal	5.85	-0.77	0.4721

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.09	0.2016

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.318	0.4692	0.6204	0.073	0.1218	0.35
Result	Diff (1-2)		-0.218	-0.04	0.1371	0.0822	0.1217	0.2331

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0545	0.297	0.623
Result	Diff (1-2)	0.077		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.52	0.6138
Result	Satterthwaite	Unequal	8	-0.52	0.6138

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.00	0.9971

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.421	0.5872	0.7534	0.0802	0.1338	0.3846
Result	Diff (1-2)		-0.345	-0.158	0.028	0.0864	0.1278	0.2449

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0599	0.462	0.748
Result	Diff (1-2)	0.0809		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.96	0.0858
Result	Satterthwaite	Unequal	7.93	-1.96	0.0861

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.21	0.8566

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.272	0.4388	0.6056	0.0805	0.1344	0.3861
Result	Diff (1-2)		-0.197	-0.01	0.1769	0.0865	0.1281	0.2454

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0601	0.239	0.58
Result	Diff (1-2)	0.081		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.12	0.9048
Result	Satterthwaite	Unequal	7.92	-0.12	0.9049

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.22	0.8508

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.5188	0.6882	0.8576	0.0817	0.1364	0.3921
Result	Diff (1-2)		-0.448	-0.259	-0.071	0.0873	0.1292	0.2475

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.061	0.453	0.8
Result	Diff (1-2)	0.0817		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.17	0.0131
Result	Satterthwaite	Unequal	7.9	-3.17	0.0133

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.26	0.8283

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.2266	0.4524	0.6782	0.1089	0.1818	0.5225
Result	Diff (1-2)		-0.249	-0.024	0.202	0.1045	0.1547	0.2963

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0813	0.284	0.696
Result	Diff (1-2)	0.0978		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.24	0.8154
Result	Satterthwaite	Unequal	6.98	-0.24	0.8163

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.24	0.4546

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.4094	0.598	0.7866	0.091	0.1519	0.4364
Result	Diff (1-2)		-0.37	-0.169	0.0314	0.0929	0.1375	0.2635

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0679	0.366	0.787
Result	Diff (1-2)	0.087		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.95	0.0877
Result	Satterthwaite	Unequal	7.63	-1.95	0.0894

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.56	0.6767

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.272	0.5228	0.7736	0.121	0.202	0.5804
Result	Diff (1-2)		-0.337	-0.094	0.1491	0.1126	0.1667	0.3193

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0903	0.202	0.751
Result	Diff (1-2)	0.1054		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.89	0.3986
Result	Satterthwaite	Unequal	6.56	-0.89	0.4041

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.76	0.3490

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.2779	0.4288	0.5797	0.0728	0.1216	0.3493
Result	Test	5	0.3214	0.4926	0.6638	0.0826	0.1378	0.3961
Result	Diff (1-2)		-0.253	-0.064	0.1257	0.0878	0.13	0.249

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0544	0.296	0.625
Result	Test	0.0616	0.299	0.667
Result	Diff (1-2)	0.0822		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.78	0.4599
Result	Satterthwaite	Unequal	7.88	-0.78	0.4603

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.29	0.8134

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.6286	0.7256	0.8226	0.0468	0.0781	0.2246
Result	Diff (1-2)		-0.185	0.0506	0.2863	0.1092	0.1616	0.3096

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.0349	0.633	0.824
Result	Diff (1-2)	0.1022		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.50	0.6339
Result	Satterthwaite	Unequal	5.04	0.50	0.6414

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.55	0.0756

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.6683	0.745	0.8217	0.037	0.0618	0.1775
Result	Diff (1-2)		-0.199	0.0312	0.2617	0.1067	0.158	0.3028

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.0276	0.647	0.808
Result	Diff (1-2)	0.1		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.31	0.7629
Result	Satterthwaite	Unequal	4.66	0.31	0.7684

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	12.09	0.0332

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC01A Acclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.5732	0.7038	0.8344	0.063	0.1051	0.3021
Result	Diff (1-2)		-0.174	0.0724	0.319	0.1142	0.1691	0.324

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.047	0.557	0.813
Result	Diff (1-2)	0.1069		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.68	0.5175
Result	Satterthwaite	Unequal	5.81	0.68	0.5244

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.17	0.1953

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC01A Unacclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.545	0.6586	0.7722	0.0548	0.0915	0.2629
Result	Diff (1-2)		-0.123	0.1176	0.3584	0.1115	0.1651	0.3163

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.0409	0.584	0.816
Result	Diff (1-2)	0.1044		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.13	0.2927
Result	Satterthwaite	Unequal	5.41	1.13	0.3075

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.51	0.1270

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.7508	0.893	1.0352	0.0686	0.1145	0.3291
Result	Diff (1-2)		-0.368	-0.117	0.1342	0.1163	0.1721	0.3298

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.0512	0.761	1.061
Result	Diff (1-2)	0.1089		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.07	0.3146
Result	Satterthwaite	Unequal	6.1	-1.07	0.3239

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.52	0.2507

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.7394	0.7866	0.8338	0.0228	0.038	0.1092
Result	Diff (1-2)		-0.235	-0.01	0.2145	0.1042	0.1542	0.2955

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.017	0.753	0.851
Result	Diff (1-2)	0.0975		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.11	0.9177
Result	Satterthwaite	Unequal	4.25	-0.11	0.9199

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	31.94	0.0054

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.8545	0.9622	1.0699	0.052	0.0867	0.2492
Result	Diff (1-2)		-0.425	-0.186	0.0529	0.1106	0.1638	0.3138

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.0388	0.839	1.07
Result	Diff (1-2)	0.1036		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.80	0.1103
Result	Satterthwaite	Unequal	5.27	-1.80	0.1295

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.13	0.1069

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.5095	0.7762	1.0429	0.1287	0.2148	0.6172
Result	Test	5	0.82	0.9024	0.9848	0.0398	0.0664	0.1908
Result	Diff (1-2)		-0.358	-0.126	0.1056	0.1074	0.159	0.3045

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0961	0.584	1.023
Result	Test	0.0297	0.823	0.957
Result	Diff (1-2)	0.1005		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.26	0.2448
Result	Satterthwaite	Unequal	4.76	-1.26	0.2675

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	10.47	0.0430

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IH02A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.5345

DF 1

Pr > Chi-Square 0.4647

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL03A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL04A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=EH02A -----

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
REF02A	5	30.0	27.50	3.818813	6.0
Test	5	25.0	27.50	3.818813	5.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.0000

Normal Approximation

Z 0.5237

One-Sided Pr > Z 0.3002

Two-Sided Pr > |Z| 0.6005

t Approximation

One-Sided Pr > Z 0.3066

Two-Sided Pr > |Z| 0.6131

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.4286

DF 1

Pr > Chi-Square 0.5127

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FP01A -----

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
REF02A	5	30.0	27.50	3.818813	6.0
Test	5	25.0	27.50	3.818813	5.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.0000

Normal Approximation

Z 0.5237

One-Sided Pr > Z 0.3002

Two-Sided Pr > |Z| 0.6005

t Approximation

One-Sided Pr > Z 0.3066

Two-Sided Pr > |Z| 0.6131

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.4286

DF 1

Pr > Chi-Square 0.5127

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT11A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE03A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE04A -----

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
REF02A	5	30.0	27.50	3.818813	6.0
Test	5	25.0	27.50	3.818813	5.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.0000

Normal Approximation

Z 0.5237

One-Sided Pr > Z 0.3002

Two-Sided Pr > |Z| 0.6005

t Approximation

One-Sided Pr > Z 0.3066

Two-Sided Pr > |Z| 0.6131

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.4286

DF 1

Pr > Chi-Square 0.5127

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE06A -----

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
REF02A	5	30.0	27.50	3.818813	6.0
Test	5	25.0	27.50	3.818813	5.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.0000

Normal Approximation

Z 0.5237

One-Sided Pr > Z 0.3002

Two-Sided Pr > |Z| 0.6005

t Approximation

One-Sided Pr > Z 0.3066

Two-Sided Pr > |Z| 0.6131

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.4286

DF 1

Pr > Chi-Square 0.5127

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE09A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IH01A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IH02A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA02A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA06A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=OH02A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC02A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 0.0982

DF 1

Pr > Chi-Square 0.7540

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.789	-0.131	1.5266	0.7999	1.3351	3.8364
rankit	Test	5	-0.372	0.1311	0.6338	0.2426	0.4049	1.1634
rankit	Diff (1-2)		-1.701	-0.262	1.1766	0.6663	0.9865	1.8899

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.5971	-1.547	1.5466
rankit	Test	0.1811	-0.375	0.6554
rankit	Diff (1-2)	0.6239		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-0.42	0.6854
rankit	Satterthwaite	Unequal	4.73	-0.42	0.6927

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	10.87	0.0402

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC01A Acclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC01A Unacclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF02A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.
rankit	Diff (1-2)		.	0	.	.	0	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	0.3184	0.3184	0.3184	.	0	.	.	
rankit	Test	5	-1.401	-0.318	0.7643	0.5224	0.8719	2.5056		
rankit	Diff (1-2)		-0.262	0.6368	1.536	0.4165	0.6166	1.1812		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	0.3184	0.3184
rankit	Test	0.3899	-1.274	0.3184
rankit	Diff (1-2)	0.3899		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.63	0.1411
rankit	Satterthwaite	Unequal	4	1.63	0.1778

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF02A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.2255	0.5615	0.8975	0.1621	0.2706	0.7777
Result	Test	5	0.4733	0.6618	0.8502	0.0909	0.1518	0.4361
Result	Diff (1-2)		-0.42	-0.1	0.2197	0.1482	0.2194	0.4203

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.121	0.0869	0.7319
Result	Test	0.0679	0.4566	0.8834
Result	Diff (1-2)	0.1388		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.72	0.4905
Result	Satterthwaite	Unequal	6.29	-0.72	0.4959

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.18	0.2887

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.2255	0.5615	0.8975	0.1621	0.2706	0.7777
Result	Test	5	0.4322	0.7095	0.9868	0.1338	0.2234	0.6418
Result	Diff (1-2)		-0.51	-0.148	0.2138	0.1676	0.2481	0.4753

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.121	0.0869	0.7319
Result	Test	0.0999	0.4208	1.0163
Result	Diff (1-2)	0.1569		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.94	0.3731
Result	Satterthwaite	Unequal	7.72	-0.94	0.3741

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.47	0.7189

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.2255	0.5615	0.8975	0.1621	0.2706	0.7777
Result	Test	5	0.4584	0.7222	0.9859	0.1272	0.2124	0.6103
Result	Diff (1-2)		-0.515	-0.161	0.1941	0.1643	0.2433	0.466

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.121	0.0869	0.7319
Result	Test	0.095	0.5303	1.0367
Result	Diff (1-2)	0.1538		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.04	0.3269
Result	Satterthwaite	Unequal	7.57	-1.04	0.3285

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.62	0.6502

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.2255	0.5615	0.8975	0.1621	0.2706	0.7777
Result	Test	5	0.4199	0.6778	0.9357	0.1244	0.2077	0.5968
Result	Diff (1-2)		-0.468	-0.116	0.2355	0.1629	0.2412	0.4621

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.121	0.0869	0.7319
Result	Test	0.0929	0.4595	0.8971
Result	Diff (1-2)	0.1526		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.76	0.4677
Result	Satterthwaite	Unequal	7.5	-0.76	0.4691

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.70	0.6206

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.2255	0.5615	0.8975	0.1621	0.2706	0.7777
Result	Test	5	0.6247	0.7826	0.9406	0.0762	0.1272	0.3655
Result	Diff (1-2)		-0.53	-0.221	0.0872	0.1428	0.2114	0.4051

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.121	0.0869	0.7319
Result	Test	0.0569	0.6559	0.991
Result	Diff (1-2)	0.1337		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.65	0.1368
Result	Satterthwaite	Unequal	5.69	-1.65	0.1520

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.53	0.1727

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.2255	0.5615	0.8975	0.1621	0.2706	0.7777
Result	Test	5	0.4128	0.6145	0.8162	0.0973	0.1625	0.4668
Result	Diff (1-2)		-0.379	-0.053	0.2725	0.1508	0.2232	0.4276

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.121	0.0869	0.7319
Result	Test	0.0727	0.4883	0.8973
Result	Diff (1-2)	0.1412		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.38	0.7170
Result	Satterthwaite	Unequal	6.55	-0.38	0.7191

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.77	0.3467

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.3678	0.691	1.0142	0.156	0.2603	0.748
Result	Diff (1-2)		-0.481	-0.209	0.064	0.1262	0.1869	0.358

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.1164	0.342	0.95
Result	Diff (1-2)	0.1182		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.76	0.1156
Result	Satterthwaite	Unequal	4.25	-1.76	0.1482

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	32.42	0.0053

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.3187	0.5246	0.7305	0.0994	0.1659	0.4766
Result	Diff (1-2)		-0.22	-0.042	0.1352	0.0822	0.1216	0.2331

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0742	0.366	0.761
Result	Diff (1-2)	0.0769		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.55	0.5983
Result	Satterthwaite	Unequal	4.6	-0.55	0.6089

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	13.16	0.0285

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.2103	0.521	0.8317	0.1499	0.2502	0.719
Result	Diff (1-2)		-0.301	-0.039	0.2237	0.1215	0.1799	0.3446

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.1119	0.198	0.774
Result	Diff (1-2)	0.1138		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.34	0.7431
Result	Satterthwaite	Unequal	4.27	-0.34	0.7504

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	29.95	0.0061

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314		
Result	Test	5	0.2314	0.4788	0.7262	0.1194	0.1992	0.5725		
Result	Diff (1-2)		-0.207	0.0036	0.2144	0.0976	0.1445	0.2769		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0891	0.209	0.714
Result	Diff (1-2)	0.0914		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.04	0.9696
Result	Satterthwaite	Unequal	4.42	0.04	0.9703

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	18.99	0.0145

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.4399	0.4922	0.5445	0.0252	0.0421	0.121
Result	Diff (1-2)		-0.074	-0.01	0.0543	0.0297	0.044	0.0842

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0188	0.428	0.537
Result	Diff (1-2)	0.0278		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.35	0.7336
Result	Satterthwaite	Unequal	7.95	-0.35	0.7336

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.18	0.8774

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.2578	0.513	0.7682	0.1231	0.2055	0.5906
Result	Diff (1-2)		-0.248	-0.031	0.1865	0.1006	0.1489	0.2852

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0919	0.23	0.741
Result	Diff (1-2)	0.0942		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.32	0.7535
Result	Satterthwaite	Unequal	4.39	-0.32	0.7601

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	20.21	0.0129

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314		
Result	Test	5	0.3095	0.4326	0.5557	0.0594	0.0991	0.2849		
Result	Diff (1-2)		-0.063	0.0498	0.1624	0.0521	0.0772	0.1479		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0443	0.356	0.593
Result	Diff (1-2)	0.0488		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.02	0.3376
Result	Satterthwaite	Unequal	5.63	1.02	0.3496

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.70	0.1629

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.4561	0.6056	0.7551	0.0721	0.1204	0.3459
Result	Diff (1-2)		-0.256	-0.123	0.0096	0.0615	0.0911	0.1744

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0538	0.488	0.768
Result	Diff (1-2)	0.0576		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.14	0.0648
Result	Satterthwaite	Unequal	5.13	-2.14	0.0840

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.93	0.0873

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.0637	0.303	0.5423	0.1155	0.1927	0.5539
Result	Diff (1-2)		-0.025	0.1794	0.3837	0.0946	0.1401	0.2684

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0862	0.043	0.537
Result	Diff (1-2)	0.0886		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.03	0.0775
Result	Satterthwaite	Unequal	4.45	2.03	0.1057

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	17.77	0.0164

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.4628	0.5716	0.6804	0.0525	0.0876	0.2518
Result	Diff (1-2)		-0.191	-0.089	0.0127	0.0472	0.0699	0.1339

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0392	0.468	0.699
Result	Diff (1-2)	0.0442		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.02	0.0783
Result	Satterthwaite	Unequal	6.03	-2.02	0.0899

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.67	0.2356

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.4088	0.5764	0.744	0.0809	0.135	0.3879
Result	Diff (1-2)		-0.241	-0.094	0.053	0.0681	0.1008	0.1931

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0604	0.367	0.698
Result	Diff (1-2)	0.0637		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.47	0.1785
Result	Satterthwaite	Unequal	4.91	-1.47	0.2013

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.72	0.0592

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.2179	0.523	0.8281	0.1472	0.2457	0.706
Result	Diff (1-2)		-0.298	-0.041	0.2171	0.1194	0.1767	0.3385

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.1099	0.26	0.903
Result	Diff (1-2)	0.1118		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.36	0.7258
Result	Satterthwaite	Unequal	4.28	-0.36	0.7337

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	28.88	0.0066

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.318	0.4692	0.6204	0.073	0.1218	0.35
Result	Diff (1-2)		-0.121	0.0132	0.1474	0.0621	0.092	0.1762

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0545	0.297	0.623
Result	Diff (1-2)	0.0582		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.23	0.8262
Result	Satterthwaite	Unequal	5.11	0.23	0.8293

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.10	0.0840

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.421	0.5872	0.7534	0.0802	0.1338	0.3846
Result	Diff (1-2)		-0.251	-0.105	0.041	0.0675	0.1	0.1916

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0599	0.462	0.748
Result	Diff (1-2)	0.0632		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.66	0.1361
Result	Satterthwaite	Unequal	4.92	-1.66	0.1594

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.57	0.0610

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.272	0.4388	0.6056	0.0805	0.1344	0.3861
Result	Diff (1-2)		-0.103	0.0436	0.19	0.0678	0.1004	0.1923

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0601	0.239	0.58
Result	Diff (1-2)	0.0635		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.69	0.5115
Result	Satterthwaite	Unequal	4.91	0.69	0.5232

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.64	0.0601

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.2266	0.4524	0.6782	0.1089	0.1818	0.5225
Result	Diff (1-2)		-0.163	0.03	0.2233	0.0895	0.1326	0.254

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0813	0.284	0.696
Result	Diff (1-2)	0.0838		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.36	0.7297
Result	Satterthwaite	Unequal	4.5	0.36	0.7366

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	15.82	0.0204

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.4094	0.598	0.7866	0.091	0.1519	0.4364
Result	Diff (1-2)		-0.279	-0.116	0.048	0.0757	0.1121	0.2148

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0679	0.366	0.787
Result	Diff (1-2)	0.0709		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.63	0.1418
Result	Satterthwaite	Unequal	4.72	-1.63	0.1675

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	11.03	0.0391

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.272	0.5228	0.7736	0.121	0.202	0.5804
Result	Diff (1-2)		-0.254	-0.04	0.1732	0.0989	0.1464	0.2805

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0903	0.202	0.751
Result	Diff (1-2)	0.0926		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.44	0.6742
Result	Satterthwaite	Unequal	4.41	-0.44	0.6832

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	19.52	0.0138

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4256	0.4824	0.5392	0.0274	0.0457	0.1314
Result	Test	5	0.3214	0.4926	0.6638	0.0826	0.1378	0.3961
Result	Diff (1-2)		-0.16	-0.01	0.1396	0.0694	0.1027	0.1967

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0204	0.42	0.543
Result	Test	0.0616	0.299	0.667
Result	Diff (1-2)	0.0649		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.16	0.8791
Result	Satterthwaite	Unequal	4.87	-0.16	0.8815

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	9.09	0.0550

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.6286	0.7256	0.8226	0.0468	0.0781	0.2246
Result	Diff (1-2)		-0.308	-0.042	0.2237	0.1232	0.1824	0.3495

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0349	0.633	0.824
Result	Diff (1-2)	0.1154		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.37	0.7228
Result	Satterthwaite	Unequal	4.8	-0.37	0.7289

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	9.90	0.0474

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.6683	0.745	0.8217	0.037	0.0618	0.1775
Result	Diff (1-2)		-0.323	-0.062	0.1997	0.1211	0.1793	0.3434

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0276	0.647	0.808
Result	Diff (1-2)	0.1134		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.55	0.6006
Result	Satterthwaite	Unequal	4.5	-0.55	0.6116

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	15.84	0.0203

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC01A Acclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.5732	0.7038	0.8344	0.063	0.1051	0.3021
Result	Diff (1-2)		-0.296	-0.021	0.2552	0.1277	0.1891	0.3623

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.047	0.557	0.813
Result	Diff (1-2)	0.1196		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.17	0.8675
Result	Satterthwaite	Unequal	5.42	-0.17	0.8695

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.47	0.1286

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC01A Unacclimated -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.545	0.6586	0.7722	0.0548	0.0915	0.2629
Result	Diff (1-2)		-0.246	0.0246	0.2952	0.1253	0.1855	0.3554

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0409	0.584	0.816
Result	Diff (1-2)	0.1173		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.21	0.8392
Result	Satterthwaite	Unequal	5.09	0.21	0.8421

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.22	0.0815

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.5994	0.799	0.9986	0.0963	0.1607	0.4619
Result	Diff (1-2)		-0.419	-0.116	0.1872	0.1403	0.2077	0.398

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0719	0.618	1.002
Result	Diff (1-2)	0.1314		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.88	0.4038
Result	Satterthwaite	Unequal	6.89	-0.88	0.4078

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.34	0.4305

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.7508	0.893	1.0352	0.0686	0.1145	0.3291
Result	Diff (1-2)		-0.49	-0.21	0.0699	0.1296	0.1918	0.3675

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0512	0.761	1.061
Result	Diff (1-2)	0.1213		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.73	0.1220
Result	Satterthwaite	Unequal	5.66	-1.73	0.1374

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.61	0.1681

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.6072	0.768	0.9288	0.0776	0.1295	0.3721
Result	Diff (1-2)		-0.371	-0.085	0.2018	0.1327	0.1965	0.3765

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0579	0.674	0.994
Result	Diff (1-2)	0.1243		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.68	0.5143
Result	Satterthwaite	Unequal	6.06	-0.68	0.5203

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.61	0.2419

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.7394	0.7866	0.8338	0.0228	0.038	0.1092
Result	Diff (1-2)		-0.36	-0.103	0.1532	0.1188	0.1759	0.3371

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.017	0.753	0.851
Result	Diff (1-2)	0.1113		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.93	0.3799
Result	Satterthwaite	Unequal	4.19	-0.93	0.4031

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	41.86	0.0032

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.8545	0.9622	1.0699	0.052	0.0867	0.2492
Result	Diff (1-2)		-0.548	-0.279	-0.01	0.1245	0.1844	0.3532

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0388	0.839	1.07
Result	Diff (1-2)	0.1166		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.39	0.0437
Result	Satterthwaite	Unequal	4.98	-2.39	0.0624

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.04	0.0680

----- Test=Neanthes UV Batch Endpoint=Individual Growt Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3779	0.6832	0.9885	0.1473	0.2459	0.7066
Result	Test	5	0.82	0.9024	0.9848	0.0398	0.0664	0.1908
Result	Diff (1-2)		-0.482	-0.219	0.0435	0.1216	0.1801	0.345

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.11	0.421	1.037
Result	Test	0.0297	0.823	0.957
Result	Diff (1-2)	0.1139		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.92	0.0905
Result	Satterthwaite	Unequal	4.58	-1.92	0.1176

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	13.72	0.0264

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BA01A -----

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
REF03A	5	22.0	27.50	4.787136	4.40
Test	5	33.0	27.50	4.787136	6.60

Wilcoxon Two-Sample Test

Statistic 22.0000

Normal Approximation

Z -1.0445

One-Sided Pr < Z 0.1481

Two-Sided Pr > |Z| 0.2963

t Approximation

One-Sided Pr < Z 0.1618

Two-Sided Pr > |Z| 0.3235

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.3200

DF 1

Pr > Chi-Square 0.2506

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL03A -----

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
REF03A	5	35.0	27.50	4.787136	7.0
Test	5	20.0	27.50	4.787136	4.0

Wilcoxon Two-Sample Test

Statistic 35.0000

Normal Approximation

Z 1.4623

One-Sided Pr > Z 0.0718

Two-Sided Pr > |Z| 0.1437

t Approximation

One-Sided Pr > Z 0.0888

Two-Sided Pr > |Z| 0.1777

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.4545

DF 1

Pr > Chi-Square 0.1172

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL04A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.5345

DF 1

Pr > Chi-Square 0.4647

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=BL06A -----

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
REF03A	5	35.0	27.50	4.787136	7.0
Test	5	20.0	27.50	4.787136	4.0

Wilcoxon Two-Sample Test

Statistic 35.0000

Normal Approximation

Z 1.4623

One-Sided Pr > Z 0.0718

Two-Sided Pr > |Z| 0.1437

t Approximation

One-Sided Pr > Z 0.0888

Two-Sided Pr > |Z| 0.1777

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.4545

DF 1

Pr > Chi-Square 0.1172

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FP01A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0982

DF 1

Pr > Chi-Square 0.7540

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT01A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0982

DF 1

Pr > Chi-Square 0.7540

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT04A -----

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
REF03A	5	23.0	27.50	4.787136	4.60
Test	5	32.0	27.50	4.787136	6.40

Wilcoxon Two-Sample Test

Statistic 23.0000

Normal Approximation

Z -0.8356

One-Sided Pr < Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr < Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT06A -----

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
REF03A	5	35.0	27.50	4.787136	7.0
Test	5	20.0	27.50	4.787136	4.0

Wilcoxon Two-Sample Test

Statistic 35.0000

Normal Approximation

Z 1.4623

One-Sided Pr > Z 0.0718

Two-Sided Pr > |Z| 0.1437

t Approximation

One-Sided Pr > Z 0.0888

Two-Sided Pr > |Z| 0.1777

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.4545

DF 1

Pr > Chi-Square 0.1172

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=FT11A -----

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
REF03A	5	33.0	27.50	4.787136	6.60
Test	5	22.0	27.50	4.787136	4.40

Wilcoxon Two-Sample Test

Statistic 33.0000

Normal Approximation

Z 1.0445

One-Sided Pr > Z 0.1481

Two-Sided Pr > |Z| 0.2963

t Approximation

One-Sided Pr > Z 0.1618

Two-Sided Pr > |Z| 0.3235

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.3200

DF 1

Pr > Chi-Square 0.2506

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE04A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0982

DF 1

Pr > Chi-Square 0.7540

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE06A -----

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
REF03A	5	25.0	27.50	4.787136	5.0
Test	5	30.0	27.50	4.787136	6.0

Wilcoxon Two-Sample Test

Statistic 25.0000

Normal Approximation

Z -0.4178

One-Sided Pr < Z 0.3381

Two-Sided Pr > |Z| 0.6761

t Approximation

One-Sided Pr < Z 0.3429

Two-Sided Pr > |Z| 0.6859

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.2727

DF 1

Pr > Chi-Square 0.6015

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE09A -----

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
REF03A	5	19.0	27.50	4.787136	3.80
Test	5	36.0	27.50	4.787136	7.20

Wilcoxon Two-Sample Test

Statistic 19.0000

Normal Approximation

Z -1.6711

One-Sided Pr < Z 0.0473

Two-Sided Pr > |Z| 0.0947

t Approximation

One-Sided Pr < Z 0.0645

Two-Sided Pr > |Z| 0.1290

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.1527

DF 1

Pr > Chi-Square 0.0758

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE14A -----

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
REF03A	5	28.0	27.50	4.787136	5.60
Test	5	27.0	27.50	4.787136	5.40

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.

Kruskal-Wallis Test

Chi-Square 0.0109

DF 1

Pr > Chi-Square 0.9168

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IE15A -----

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
REF03A	5	23.0	27.50	4.787136	4.60
Test	5	32.0	27.50	4.787136	6.40

Wilcoxon Two-Sample Test

Statistic 23.0000

Normal Approximation

Z -0.8356

One-Sided Pr < Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr < Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=IH01A -----

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
REF03A	5	23.0	27.50	4.787136	4.60
Test	5	32.0	27.50	4.787136	6.40

Wilcoxon Two-Sample Test

Statistic 23.0000

Normal Approximation

Z -0.8356

One-Sided Pr < Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr < Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=KP05A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0982

DF 1

Pr > Chi-Square 0.7540

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=KP06A -----

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
REF03A	5	32.0	27.50	4.787136	6.40
Test	5	23.0	27.50	4.787136	4.60

Wilcoxon Two-Sample Test

Statistic 32.0000

Normal Approximation

Z 0.8356

One-Sided Pr > Z 0.2017

Two-Sided Pr > |Z| 0.4034

t Approximation

One-Sided Pr > Z 0.2125

Two-Sided Pr > |Z| 0.4250

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.8836

DF 1

Pr > Chi-Square 0.3472

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA02A -----

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
REF03A	5	35.0	27.50	4.787136	7.0
Test	5	20.0	27.50	4.787136	4.0

Wilcoxon Two-Sample Test

Statistic 35.0000

Normal Approximation

Z 1.4623

One-Sided Pr > Z 0.0718

Two-Sided Pr > |Z| 0.1437

t Approximation

One-Sided Pr > Z 0.0888

Two-Sided Pr > |Z| 0.1777

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.4545

DF 1

Pr > Chi-Square 0.1172

----- Test=Neanthes Batch 1 Endpoint=Individual Growt Treatment=MA05A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0982

DF 1

Pr > Chi-Square 0.7540

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL03A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL04A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=EH02A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.1500

DF 1

Pr > Chi-Square 0.6985

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FP01A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.1500

DF 1

Pr > Chi-Square 0.6985

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT11A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE03A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE04A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.1500

DF 1

Pr > Chi-Square 0.6985

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE06A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.1500

DF 1

Pr > Chi-Square 0.6985

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE09A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IH01A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IH02A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA02A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA06A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=OH02A -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=D005A -----

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
REF03A	5	30.50	27.50	4.758034	6.10
Test	5	24.50	27.50	4.758034	4.90

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.5000

Normal Approximation

Z 0.5254

One-Sided Pr > Z 0.2996

Two-Sided Pr > |Z| 0.5993

t Approximation

One-Sided Pr > Z 0.3060

Two-Sided Pr > |Z| 0.6120

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.3975

DF 1

Pr > Chi-Square 0.5284

----- Test=Neanthes Batch 2 Endpoint=Individual Growt Treatment=MA01A -----

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
REF03A	5	19.0	27.50	4.787136	3.80
Test	5	36.0	27.50	4.787136	7.20

Wilcoxon Two-Sample Test

Statistic 19.0000

Normal Approximation

Z -1.6711

One-Sided Pr < Z 0.0473

Two-Sided Pr > |Z| 0.0947

t Approximation

One-Sided Pr < Z 0.0645

Two-Sided Pr > |Z| 0.1290

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.1527

DF 1

Pr > Chi-Square 0.0758

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC01A Acclimated -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC01A Unacclimated -----

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
REF03A	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.

Kruskal-Wallis Test

Chi-Square 0.0000

DF 1

Pr > Chi-Square 1.0000

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=LA02A -----

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
REF03A	5	30.0	27.50	3.818813	6.0
Test	5	25.0	27.50	3.818813	5.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.0000

Normal Approximation

Z 0.5237

One-Sided Pr > Z 0.3002

Two-Sided Pr > |Z| 0.6005

t Approximation

One-Sided Pr > Z 0.3066

Two-Sided Pr > |Z| 0.6131

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.4286

DF 1

Pr > Chi-Square 0.5127

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 1 Endpoint=Percent Survival Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF03A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF03A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF03A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	0.1718	0.1718	0.1718	.	0	.	.	
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev	Std Dev	
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	.
rankit	Diff (1-2)		.	0	.	.	0	.	.	.

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF03A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Test	5	-6E-17	-6E-17	-6E-17	.	0	.	.	
rankit	Diff (1-2)		.	0	.	.	0	.	.	

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	-6E-17	-6E-17
rankit	Test	0	-6E-17	-6E-17
rankit	Diff (1-2)	.		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	.	.
rankit	Satterthwaite	Unequal	8	.	.

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	.	.

----- Test=Neanthes Batch 2 Endpoint=Percent Survival Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
rankit	REF03A	5	0.1718	0.1718	0.1718	.	0	.
rankit	Test	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0	0.1718	0.1718
rankit	Test	0.3437	-1.547	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Neanthes UV Batch Endpoint=Percent Survival Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
rankit	REF03A	5	-1.126	-0.172	0.7824	0.4605	0.7685	2.2084		
rankit	Test	5	0.1718	0.1718	0.1718	.	0	.		
rankit	Diff (1-2)		-1.136	-0.344	0.4489	0.3671	0.5434	1.0411		

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF03A	0.3437	-1.547	0.1718
rankit	Test	0	0.1718	0.1718
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-1.00	0.3466
rankit	Satterthwaite	Unequal	4	-1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
result	Control	5	0.3667	0.407	0.4473	0.0194	0.0325	0.0933		
result	Reference	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472		
result	Diff (1-2)		-0.037	0.1356	0.3083	0.08	0.1184	0.2268		

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0145	0.3632	0.4397
result	Reference	0.0735	0	0.4154
result	Diff (1-2)	0.0749		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	1.81	0.1078
result	Satterthwaite	Unequal	4.31	1.81	0.1392

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	25.61	0.0083

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.3667	0.407	0.4473	0.0194	0.0325	0.0933
result	Reference	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
result	Diff (1-2)		-0.088	0.1071	0.3021	0.0903	0.1337	0.2561

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0145	0.3632	0.4397
result	Reference	0.0833	0	0.4841
result	Diff (1-2)	0.0846		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	1.27	0.2409
result	Satterthwaite	Unequal	4.24	1.27	0.2703

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	32.94	0.0051

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.3667	0.407	0.4473	0.0194	0.0325	0.0933
result	Reference	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
result	Diff (1-2)		-0.233	-0.138	-0.044	0.0439	0.065	0.1245

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0145	0.3632	0.4397
result	Reference	0.0385	0.4257	0.6581
result	Diff (1-2)	0.0411		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-3.37	0.0098
result	Satterthwaite	Unequal	5.12	-3.37	0.0192

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	7.02	0.0856

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.061	0.2393	0.4176	0.086	0.1436	0.4126
result	Reference	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
result	Diff (1-2)		-0.289	-0.103	0.0816	0.0857	0.1269	0.2432

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0642	0	0.3573
result	Reference	0.0482	0.1799	0.4716
result	Diff (1-2)	0.0803		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-1.29	0.2334
result	Satterthwaite	Unequal	7.42	-1.29	0.2361

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.78	0.5919

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.061	0.2393	0.4176	0.086	0.1436	0.4126
result	Reference	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
result	Diff (1-2)		-0.38	-0.218	-0.057	0.0749	0.1109	0.2125

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0642	0	0.3573
result	Reference	0.0283	0.3661	0.5348
result	Diff (1-2)	0.0702		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-3.11	0.0144
result	Satterthwaite	Unequal	5.5	-3.11	0.0234

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	5.16	0.1412

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0402	0.2583	0.4763	0.1052	0.1756	0.5045
result	Reference	5	0.269	0.41	0.551	0.068	0.1136	0.3263
result	Diff (1-2)		-0.367	-0.152	0.0639	0.0999	0.1479	0.2833

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0785	0	0.4165
result	Reference	0.0508	0.3415	0.6122
result	Diff (1-2)	0.0935		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-1.62	0.1433
result	Satterthwaite	Unequal	6.85	-1.62	0.1496

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.39	0.4194

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0402	0.2583	0.4763	0.1052	0.1756	0.5045
result	Reference	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
result	Diff (1-2)		-0.324	-0.08	0.1637	0.1129	0.1672	0.3202

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0785	0	0.4165
result	Reference	0.0708	0.1046	0.5173
result	Diff (1-2)	0.1057		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-0.76	0.4703
result	Satterthwaite	Unequal	7.92	-0.76	0.4705

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.23	0.8457

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0402	0.2583	0.4763	0.1052	0.1756	0.5045
result	Reference	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
result	Diff (1-2)		-0.609	-0.351	-0.092	0.1196	0.177	0.3392

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0785	0	0.4165
result	Reference	0.0798	0.4046	0.8534
result	Diff (1-2)	0.112		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-3.13	0.0140
result	Satterthwaite	Unequal	8	-3.13	0.0140

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.03	0.9752

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RF01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0342	0.2214	0.4086	0.0903	0.1508	0.4332
result	Reference	5	-0.057	0.032	0.1207	0.0428	0.0715	0.2053
result	Diff (1-2)		0.0174	0.1895	0.3615	0.0797	0.118	0.226

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0674	0	0.4116
result	Reference	0.032	0	0.1598
result	Diff (1-2)	0.0746		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	2.54	0.0347
result	Satterthwaite	Unequal	5.71	2.54	0.0461

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	4.45	0.1773

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RF02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0342	0.2214	0.4086	0.0903	0.1508	0.4332
result	Reference	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
result	Diff (1-2)		-0.154	0.0701	0.2946	0.104	0.1539	0.2949

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0674	0	0.4116
result	Reference	0.0702	0	0.3168
result	Diff (1-2)	0.0974		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	0.72	0.4921
result	Satterthwaite	Unequal	7.99	0.72	0.4921

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	1.09	0.9386

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RF03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
result	Control	5	0.0342	0.2214	0.4086	0.0903	0.1508	0.4332
result	Reference	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
result	Diff (1-2)		-0.356	-0.087	0.1829	0.1248	0.1848	0.3539

Statistics

Variable	group	Std Err	Minimum	Maximum
result	Control	0.0674	0	0.4116
result	Reference	0.0954	0	0.5175
result	Diff (1-2)	0.1168		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
result	Pooled	Equal	8	-0.74	0.4798
result	Satterthwaite	Unequal	7.2	-0.74	0.4821

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
result	Folded F	4	4	2.00	0.5174

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=RF01A -----

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	23.50	27.50	4.772607	4.70
Reference	5	31.50	27.50	4.772607	6.30

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 23.5000

Normal Approximation

Z -0.7334

One-Sided Pr < Z 0.2317

Two-Sided Pr > |Z| 0.4633

t Approximation

One-Sided Pr < Z 0.2410

Two-Sided Pr > |Z| 0.4820

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.7024

DF 1

Pr > Chi-Square 0.4020

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.7386	0.9267	1.1147	0.0907	0.1515	0.4352
Result	Diff (1-2)		-0.886	-0.655	-0.425	0.1067	0.158	0.3027

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0677	0.7323	1.0933
Result	Diff (1-2)	0.0999		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-6.56	0.0002
Result	Satterthwaite	Unequal	7.95	-6.56	0.0002

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.18	0.8788

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.6978	0.9013	1.1047	0.0982	0.1638	0.4708
Result	Diff (1-2)		-0.869	-0.63	-0.391	0.1108	0.1641	0.3143

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0733	0.7129	1.1172
Result	Diff (1-2)	0.1038		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-6.07	0.0003
Result	Satterthwaite	Unequal	8	-6.07	0.0003

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.01	0.9961

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.4	0.5258	0.6516	0.0607	0.1013	0.2912
Result	Diff (1-2)		-0.453	-0.254	-0.055	0.0922	0.1365	0.2615

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0453	0.4307	0.6699
Result	Diff (1-2)	0.0863		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.95	0.0185
Result	Satterthwaite	Unequal	6.66	-2.95	0.0228

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.63	0.3722

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.4431	0.5375	0.6318	0.0455	0.076	0.2183
Result	Diff (1-2)		-0.453	-0.266	-0.079	0.0864	0.128	0.2452

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.034	0.4604	0.6501
Result	Diff (1-2)	0.0809		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.29	0.0111
Result	Satterthwaite	Unequal	5.64	-3.29	0.0183

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.67	0.1645

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.4734	0.61	0.7467	0.0659	0.1101	0.3163
Result	Diff (1-2)		-0.543	-0.339	-0.135	0.0944	0.1398	0.2679

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0492	0.4555	0.7052
Result	Diff (1-2)	0.0884		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.83	0.0050
Result	Satterthwaite	Unequal	6.99	-3.83	0.0065

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.23	0.4570

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.516	0.6619	0.8077	0.0704	0.1175	0.3375
Result	Diff (1-2)		-0.599	-0.39	-0.182	0.0965	0.1428	0.2736

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0525	0.5293	0.8285
Result	Diff (1-2)	0.0903		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.32	0.0025
Result	Satterthwaite	Unequal	7.24	-4.32	0.0032

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.96	0.5319

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.6672	0.7151	0.763	0.0231	0.0386	0.1109
Result	Diff (1-2)		-0.618	-0.444	-0.27	0.0806	0.1193	0.2286

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0173	0.6581	0.7631
Result	Diff (1-2)	0.0755		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.88	0.0004
Result	Satterthwaite	Unequal	4.44	-5.88	0.0030

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	18.12	0.0158

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.6229	0.7514	0.88	0.062	0.1035	0.2975
Result	Diff (1-2)		-0.68	-0.48	-0.28	0.0927	0.1373	0.263

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0463	0.6461	0.9183
Result	Diff (1-2)	0.0868		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.53	0.0006
Result	Satterthwaite	Unequal	6.74	-5.53	0.0010

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.52	0.3931

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.596	0.8148	1.0336	0.1056	0.1762	0.5064
Result	Diff (1-2)		-0.792	-0.543	-0.295	0.1151	0.1703	0.3263

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0788	0.5933	0.9959
Result	Diff (1-2)	0.1077		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.04	0.0010
Result	Satterthwaite	Unequal	7.96	-5.04	0.0010

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.15	0.8950

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.5815	0.8722	1.1629	0.1403	0.2341	0.6727
Result	Diff (1-2)		-0.896	-0.601	-0.306	0.1366	0.2022	0.3874

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.1047	0.5933	1.2306
Result	Diff (1-2)	0.1279		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.70	0.0015
Result	Satterthwaite	Unequal	7.17	-4.70	0.0021

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.03	0.5095

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.6433	0.8392	1.035	0.0945	0.1577	0.4533
Result	Diff (1-2)		-0.803	-0.568	-0.333	0.1088	0.161	0.3085

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0705	0.6935	1.0933
Result	Diff (1-2)	0.1018		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.57	0.0005
Result	Satterthwaite	Unequal	7.99	-5.57	0.0005

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.08	0.9393

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.6803	0.7636	0.8469	0.0402	0.0671	0.1927
Result	Diff (1-2)		-0.675	-0.492	-0.309	0.0847	0.1255	0.2404

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.03	0.6501	0.8246
Result	Diff (1-2)	0.0794		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-6.20	0.0003
Result	Satterthwaite	Unequal	5.3	-6.20	0.0013

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.00	0.1109

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.3511	0.7007	1.0502	0.1687	0.2815	0.8089
Result	Diff (1-2)		-0.765	-0.429	-0.093	0.1557	0.2305	0.4415

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.1259	0.4205	1.1734
Result	Diff (1-2)	0.1458		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.95	0.0186
Result	Satterthwaite	Unequal	6.44	-2.95	0.0237

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.94	0.3216

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.5875	0.8235	1.0596	0.1139	0.1901	0.5462
Result	Diff (1-2)		-0.811	-0.552	-0.293	0.12	0.1776	0.3403

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.085	0.5892	1.1124
Result	Diff (1-2)	0.1123		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.91	0.0012
Result	Satterthwaite	Unequal	7.84	-4.91	0.0012

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.34	0.7842

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.5576	0.7296	0.9016	0.083	0.1385	0.3981
Result	Diff (1-2)		-0.68	-0.458	-0.237	0.1026	0.152	0.2911

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.062	0.5808	0.9263
Result	Diff (1-2)	0.0961		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.77	0.0014
Result	Satterthwaite	Unequal	7.78	-4.77	0.0015

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.41	0.7494

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.7391	0.9181	1.0972	0.0864	0.1442	0.4143
Result	Diff (1-2)		-0.872	-0.647	-0.421	0.1044	0.1546	0.2961

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0645	0.7246	1.0432
Result	Diff (1-2)	0.0977		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-6.62	0.0002
Result	Satterthwaite	Unequal	7.87	-6.62	0.0002

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.30	0.8067

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.0674	0.2714	0.4754	0.0984	0.1643	0.472
Result	Test	5	0.352	0.4684	0.5848	0.0562	0.0938	0.2694
Result	Diff (1-2)		-0.392	-0.197	-0.002	0.0903	0.1337	0.2562

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0735	0	0.4154
Result	Test	0.0419	0.3304	0.5597
Result	Diff (1-2)	0.0846		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.33	0.0482
Result	Satterthwaite	Unequal	6.36	-2.33	0.0563

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.07	0.3029

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.5308	0.8509	1.171	0.1544	0.2578	0.7407
Result	Diff (1-2)		-0.667	-0.393	-0.12	0.1268	0.1877	0.3595

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.1153	0.5939	1.2047
Result	Diff (1-2)	0.1187		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.31	0.0106
Result	Satterthwaite	Unequal	4.48	-3.31	0.0249

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	16.62	0.0186

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.2336	0.4907	0.7478	0.1241	0.2071	0.5951
Result	Diff (1-2)		-0.256	-0.033	0.1902	0.1034	0.1531	0.2933

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0926	0.2251	0.7907
Result	Diff (1-2)	0.0968		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.34	0.7411
Result	Satterthwaite	Unequal	4.74	-0.34	0.7469

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	10.72	0.0412

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.3982	0.7205	1.0428	0.1555	0.2596	0.7459
Result	Diff (1-2)		-0.538	-0.263	0.0126	0.1276	0.1889	0.3619

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.1161	0.5017	1.117
Result	Diff (1-2)	0.1195		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.20	0.0589
Result	Satterthwaite	Unequal	4.47	-2.20	0.0854

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	16.85	0.0181

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.5255	0.5997	0.6739	0.0358	0.0598	0.1717
Result	Diff (1-2)		-0.232	-0.142	-0.052	0.0416	0.0615	0.1179

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0267	0.5184	0.6723
Result	Diff (1-2)	0.0389		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.65	0.0065
Result	Satterthwaite	Unequal	7.97	-3.65	0.0065

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.12	0.9154

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.3426	0.466	0.5894	0.0596	0.0994	0.2857
Result	Diff (1-2)		-0.13	-0.008	0.1131	0.0563	0.0833	0.1596

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0445	0.3607	0.6092
Result	Diff (1-2)	0.0527		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.16	0.8769
Result	Satterthwaite	Unequal	6.78	-0.16	0.8776

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.47	0.4023

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.2901	0.3498	0.4095	0.0288	0.0481	0.1382
Result	Diff (1-2)		0.0259	0.1078	0.1897	0.0379	0.0562	0.1076

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0215	0.2836	0.4117
Result	Diff (1-2)	0.0355		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.03	0.0162
Result	Satterthwaite	Unequal	7.47	3.03	0.0176

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.73	0.6089

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.6567	0.7256	0.7945	0.0332	0.0555	0.1594
Result	Diff (1-2)		-0.355	-0.268	-0.181	0.0402	0.0595	0.114

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0248	0.6796	0.8192
Result	Diff (1-2)	0.0376		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-7.12	<.0001
Result	Satterthwaite	Unequal	7.87	-7.12	0.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.30	0.8062

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.3661	0.4518	0.5374	0.0413	0.069	0.1983
Result	Diff (1-2)		-0.091	0.0058	0.1024	0.0447	0.0662	0.1268

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0309	0.3766	0.5469
Result	Diff (1-2)	0.0419		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.14	0.8926
Result	Satterthwaite	Unequal	7.94	0.14	0.8926

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.19	0.8695

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.6575	0.7134	0.7694	0.027	0.0451	0.1295
Result	Diff (1-2)		-0.336	-0.256	-0.176	0.0371	0.0549	0.1052

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0202	0.6723	0.7907
Result	Diff (1-2)	0.0347		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-7.37	<.0001
Result	Satterthwaite	Unequal	7.23	-7.37	0.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.97	0.5281

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.6001	0.7013	0.8024	0.0488	0.0815	0.2341
Result	Diff (1-2)		-0.35	-0.244	-0.137	0.0493	0.0729	0.1397

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0364	0.5978	0.8192
Result	Diff (1-2)	0.0461		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.28	0.0007
Result	Satterthwaite	Unequal	7.54	-5.28	0.0009

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.66	0.6353

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.3982	0.4983	0.5985	0.0483	0.0807	0.2318
Result	Diff (1-2)		-0.146	-0.041	0.065	0.049	0.0725	0.1388

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0361	0.397	0.5785
Result	Diff (1-2)	0.0458		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.89	0.3999
Result	Satterthwaite	Unequal	7.57	-0.89	0.4014

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.63	0.6487

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.5839	0.6416	0.6993	0.0279	0.0465	0.1336
Result	Diff (1-2)		-0.265	-0.184	-0.103	0.0375	0.0555	0.1063

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0208	0.5628	0.6796
Result	Diff (1-2)	0.0351		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.24	0.0008
Result	Satterthwaite	Unequal	7.35	-5.24	0.0010

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.85	0.5661

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.3388	0.665	0.9912	0.1574	0.2627	0.755
Result	Diff (1-2)		-0.486	-0.207	0.0713	0.1291	0.1911	0.3661

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.1175	0.4672	1.0905
Result	Diff (1-2)	0.1209		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.72	0.1245
Result	Satterthwaite	Unequal	4.46	-1.72	0.1538

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	17.26	0.0173

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.504	0.6489	0.7937	0.0699	0.1167	0.3352
Result	Diff (1-2)		-0.328	-0.191	-0.054	0.0634	0.0938	0.1797

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0522	0.5101	0.8085
Result	Diff (1-2)	0.0593		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.22	0.0122
Result	Satterthwaite	Unequal	6.16	-3.22	0.0174

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.40	0.2626

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.2486	0.3742	0.4998	0.0606	0.1012	0.2907
Result	Diff (1-2)		-0.04	0.0834	0.2064	0.057	0.0844	0.1616

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0452	0.2769	0.489
Result	Diff (1-2)	0.0534		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.56	0.1566
Result	Satterthwaite	Unequal	6.71	1.56	0.1637

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.56	0.3849

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.3791	0.4576	0.5361	0.0379	0.0632	0.1817
Result	Test	5	0.3375	0.5315	0.7255	0.0936	0.1562	0.449
Result	Diff (1-2)		-0.248	-0.074	0.0999	0.0805	0.1192	0.2283

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0283	0.3661	0.5348
Result	Test	0.0699	0.3766	0.7872
Result	Diff (1-2)	0.0754		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.98	0.3556
Result	Satterthwaite	Unequal	5.28	-0.98	0.3697

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.11	0.1077

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.1715	0.59	1.0084	0.2019	0.337	0.9685
Result	Diff (1-2)		-0.547	-0.18	0.1868	0.1699	0.2515	0.4818

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.1507	0.2252	1.0849
Result	Diff (1-2)	0.159		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.13	0.2906
Result	Satterthwaite	Unequal	4.9	-1.13	0.3102

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.81	0.0581

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.1433	0.423	0.7027	0.135	0.2252	0.6472
Result	Diff (1-2)		-0.273	-0.013	0.2471	0.1205	0.1784	0.3417

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.1007	0.1046	0.7363
Result	Diff (1-2)	0.1128		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.12	0.9111
Result	Satterthwaite	Unequal	5.91	-0.12	0.9121

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.93	0.2132

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.0619	0.2763	0.4906	0.1034	0.1726	0.4961
Result	Diff (1-2)		-0.079	0.1337	0.3469	0.0987	0.1461	0.2799

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.0772	0	0.4754
Result	Diff (1-2)	0.0924		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.45	0.1859
Result	Satterthwaite	Unequal	6.92	1.45	0.1916

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.31	0.4371

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Upper CL		Lower CL	Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	-0.04	0.1734	0.3871	0.1031	0.1721	0.4945
Result	Diff (1-2)		0.0239	0.2366	0.4492	0.0985	0.1458	0.2793

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.077	0	0.3992
Result	Diff (1-2)	0.0922		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.57	0.0334
Result	Satterthwaite	Unequal	6.93	2.57	0.0376

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.30	0.4406

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.2386	0.3963	0.5541	0.0761	0.127	0.3651
Result	Diff (1-2)		-0.162	0.0137	0.1894	0.0814	0.1205	0.2308

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.0568	0.1752	0.4849
Result	Diff (1-2)	0.0762		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.18	0.8621
Result	Satterthwaite	Unequal	7.9	0.18	0.8622

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.25	0.8332

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Std Dev		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.1783	0.6585	1.1387	0.2317	0.3867	1.1113
Result	Diff (1-2)		-0.664	-0.249	0.1672	0.1925	0.285	0.546

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.173	0.3093	1.2601
Result	Diff (1-2)	0.1803		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.38	0.2053
Result	Satterthwaite	Unequal	4.68	-1.38	0.2302

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	11.60	0.0358

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.9399	1.0983	1.2567	0.0764	0.1276	0.3666
Result	Diff (1-2)		-0.864	-0.688	-0.512	0.0816	0.1208	0.2314

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.0571	0.9009	1.2281
Result	Diff (1-2)	0.0764		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-9.01	<.0001
Result	Satterthwaite	Unequal	7.89	-9.01	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.26	0.8270

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.4688	0.9646	1.4603	0.2392	0.3993	1.1473
Result	Diff (1-2)		-0.983	-0.555	-0.126	0.1983	0.2935	0.5623

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.1786	0.5218	1.3439
Result	Diff (1-2)	0.1856		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.99	0.0174
Result	Satterthwaite	Unequal	4.64	-2.99	0.0335

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	12.36	0.0319

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	0.269	0.41	0.551	0.068	0.1136	0.3263
Result	Test	5	0.5223	0.8034	1.0845	0.1356	0.2264	0.6505
Result	Diff (1-2)		-0.655	-0.393	-0.132	0.121	0.1791	0.3431

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.0508	0.3415	0.6122
Result	Test	0.1012	0.456	1.0085
Result	Diff (1-2)	0.1133		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.47	0.0084
Result	Satterthwaite	Unequal	5.89	-3.47	0.0136

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.97	0.2100

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC01A-U -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.057	0.032	0.1207	0.0428	0.0715	0.2053
Result	Test	5	0.0682	0.2864	0.5046	0.1053	0.1757	0.505
Result	Diff (1-2)		-0.45	-0.254	-0.059	0.0906	0.1341	0.257

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.032	0	0.1598
Result	Test	0.0786	0	0.4772
Result	Diff (1-2)	0.0848		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.00	0.0171
Result	Satterthwaite	Unequal	5.29	-3.00	0.0281

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.05	0.1094

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.057	0.032	0.1207	0.0428	0.0715	0.2053
Result	Test	5	0.2467	0.3531	0.4594	0.0513	0.0857	0.2462
Result	Diff (1-2)		-0.436	-0.321	-0.206	0.0533	0.0789	0.1511

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.032	0	0.1598
Result	Test	0.0383	0.2364	0.4562
Result	Diff (1-2)	0.0499		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-6.44	0.0002
Result	Satterthwaite	Unequal	7.75	-6.44	0.0002

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.44	0.7338

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.057	0.032	0.1207	0.0428	0.0715	0.2053
Result	Test	5	0.4586	0.5868	0.7149	0.0618	0.1032	0.2966
Result	Diff (1-2)		-0.684	-0.555	-0.425	0.06	0.0888	0.1701

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.032	0	0.1598
Result	Test	0.0462	0.4772	0.7326
Result	Diff (1-2)	0.0561		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-9.88	<.0001
Result	Satterthwaite	Unequal	7.12	-9.88	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.09	0.4939

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF01A	5	-0.057	0.032	0.1207	0.0428	0.0715	0.2053
Result	Test	5	0.8197	1.0033	1.1869	0.0886	0.1478	0.4248
Result	Diff (1-2)		-1.141	-0.971	-0.802	0.0784	0.1161	0.2224

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF01A	0.032	0	0.1598
Result	Test	0.0661	0.7833	1.1474
Result	Diff (1-2)	0.0734		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-13.23	<.0001
Result	Satterthwaite	Unequal	5.77	-13.23	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.28	0.1880

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=FT01A -----

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
REF01A	5	20.0	27.50	4.787136	4.0
Test	5	35.0	27.50	4.787136	7.0

Wilcoxon Two-Sample Test

Statistic 20.0000

Normal Approximation

Z -1.4623

One-Sided Pr < Z 0.0718

Two-Sided Pr > |Z| 0.1437

t Approximation

One-Sided Pr < Z 0.0888

Two-Sided Pr > |Z| 0.1777

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.4545

DF 1

Pr > Chi-Square 0.1172

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED05A -----

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
REF01A	5	19.0	27.50	4.787136	3.80
Test	5	36.0	27.50	4.787136	7.20

Wilcoxon Two-Sample Test

Statistic 19.0000

Normal Approximation

Z -1.6711

One-Sided Pr < Z 0.0473

Two-Sided Pr > |Z| 0.0947

t Approximation

One-Sided Pr < Z 0.0645

Two-Sided Pr > |Z| 0.1290

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.1527

DF 1

Pr > Chi-Square 0.0758

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD01A -----

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
REF01A	5	19.0	27.50	4.787136	3.80
Test	5	36.0	27.50	4.787136	7.20

Wilcoxon Two-Sample Test

Statistic 19.0000

Normal Approximation

Z -1.6711

One-Sided Pr < Z 0.0473

Two-Sided Pr > |Z| 0.0947

t Approximation

One-Sided Pr < Z 0.0645

Two-Sided Pr > |Z| 0.1290

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 3.1527

DF 1

Pr > Chi-Square 0.0758

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=WW01A -----

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
REF01A	5	31.50	27.50	4.772607	6.30
Test	5	23.50	27.50	4.772607	4.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 31.5000

Normal Approximation

Z 0.7334

One-Sided Pr > Z 0.2317

Two-Sided Pr > |Z| 0.4633

t Approximation

One-Sided Pr > Z 0.2410

Two-Sided Pr > |Z| 0.4820

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.7024

DF 1

Pr > Chi-Square 0.4020

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=C001A -----

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
REF01A	5	18.0	27.50	4.487637	3.60
Test	5	37.0	27.50	4.487637	7.40

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 18.0000

Normal Approximation

Z -2.0055

One-Sided Pr < Z 0.0225

Two-Sided Pr > |Z| 0.0449

t Approximation

One-Sided Pr < Z 0.0379

Two-Sided Pr > |Z| 0.0759

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 4.4814

DF 1

Pr > Chi-Square 0.0343

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=C004A -----

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
REF01A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC01A-A -----

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
REF01A	5	18.0	27.50	4.472136	3.60
Test	5	37.0	27.50	4.472136	7.40

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 18.0000

Normal Approximation

Z -2.0125

One-Sided Pr < Z 0.0221

Two-Sided Pr > |Z| 0.0442

t Approximation

One-Sided Pr < Z 0.0375

Two-Sided Pr > |Z| 0.0750

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 4.5125

DF 1

Pr > Chi-Square 0.0336

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RL01A -----

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
REF01A	5	26.0	27.50	3.872983	5.20
Test	5	29.0	27.50	3.872983	5.80

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.0000

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.

Kruskal-Wallis Test

Chi-Square 0.1500

DF 1

Pr > Chi-Square 0.6985

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RL02A -----

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
REF01A	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.

Kruskal-Wallis Test

Chi-Square 0.0222

DF 1

Pr > Chi-Square 0.8815

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF01A	5	-0.782	0.1718	1.1261	0.4605	0.7685	2.2084
rankit	Test	5	-0.172	-0.172	-0.172	.	0	.
rankit	Diff (1-2)		-0.449	0.3437	1.1363	0.3671	0.5434	1.0411

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF01A	0.3437	-0.172	1.5466
rankit	Test	0	-0.172	-0.172
rankit	Diff (1-2)	0.3437		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	1.00	0.3466
rankit	Satterthwaite	Unequal	4	1.00	0.3739

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.7386	0.9267	1.1147	0.0907	0.1515	0.4352
Result	Diff (1-2)		-0.874	-0.627	-0.379	0.1147	0.1698	0.3252

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0677	0.7323	1.0933
Result	Diff (1-2)	0.1074		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.84	0.0004
Result	Satterthwaite	Unequal	7.68	-5.84	0.0005

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.51	0.6982

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.6978	0.9013	1.1047	0.0982	0.1638	0.4708
Result	Diff (1-2)		-0.857	-0.601	-0.346	0.1185	0.1754	0.3361

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0733	0.7129	1.1172
Result	Diff (1-2)	0.1109		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.42	0.0006
Result	Satterthwaite	Unequal	7.87	-5.42	0.0007

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.29	0.8095

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.4	0.5258	0.6516	0.0607	0.1013	0.2912
Result	Diff (1-2)		-0.445	-0.226	-0.007	0.1013	0.15	0.2873

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0453	0.4307	0.6699
Result	Diff (1-2)	0.0948		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.38	0.0444
Result	Satterthwaite	Unequal	6.18	-2.38	0.0534

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.38	0.2653

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Upper CL	Lower CL	Upper CL
			Mean	Mean	Std Dev	Std Dev
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116
Result	Test	5	0.4431	0.5375	0.6318	0.0455
Result	Diff (1-2)		-0.445	-0.238	-0.03	0.0961

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.034	0.4604	0.6501
Result	Diff (1-2)	0.09		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.64	0.0297
Result	Satterthwaite	Unequal	5.3	-2.64	0.0434

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.01	0.1105

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.4734	0.61	0.7467	0.0659	0.1101	0.3163
Result	Diff (1-2)		-0.533	-0.31	-0.087	0.1033	0.153	0.2931

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0492	0.4555	0.7052
Result	Diff (1-2)	0.0968		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.21	0.0125
Result	Satterthwaite	Unequal	6.49	-3.21	0.0166

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.86	0.3324

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.516	0.6619	0.8077	0.0704	0.1175	0.3375
Result	Diff (1-2)		-0.589	-0.362	-0.135	0.1052	0.1557	0.2983

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0525	0.5293	0.8285
Result	Diff (1-2)	0.0985		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.68	0.0063
Result	Satterthwaite	Unequal	6.75	-3.68	0.0084

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.51	0.3935

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.6672	0.7151	0.763	0.0231	0.0386	0.1109
Result	Diff (1-2)		-0.611	-0.415	-0.219	0.0909	0.1345	0.2577

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0173	0.6581	0.7631
Result	Diff (1-2)	0.0851		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.88	0.0012
Result	Satterthwaite	Unequal	4.34	-4.88	0.0066

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	23.31	0.0099

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.6229	0.7514	0.88	0.062	0.1035	0.2975
Result	Diff (1-2)		-0.671	-0.452	-0.232	0.1018	0.1507	0.2887

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0463	0.6461	0.9183
Result	Diff (1-2)	0.0953		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.74	0.0015
Result	Satterthwaite	Unequal	6.26	-4.74	0.0029

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.24	0.2816

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.596	0.8148	1.0336	0.1056	0.1762	0.5064
Result	Diff (1-2)		-0.779	-0.515	-0.25	0.1225	0.1813	0.3474

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0788	0.5933	0.9959
Result	Diff (1-2)	0.1147		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.49	0.0020
Result	Satterthwaite	Unequal	7.98	-4.49	0.0020

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.12	0.9169

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.5815	0.8722	1.1629	0.1403	0.2341	0.6727
Result	Diff (1-2)		-0.881	-0.572	-0.264	0.1429	0.2115	0.4053

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.1047	0.5933	1.2306
Result	Diff (1-2)	0.1338		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.28	0.0027
Result	Satterthwaite	Unequal	7.62	-4.28	0.0030

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.58	0.6688

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.6433	0.8392	1.035	0.0945	0.1577	0.4533
Result	Diff (1-2)		-0.791	-0.539	-0.288	0.1166	0.1726	0.3307

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0705	0.6935	1.0933
Result	Diff (1-2)	0.1092		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.94	0.0011
Result	Satterthwaite	Unequal	7.79	-4.94	0.0012

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.39	0.7551

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.6803	0.7636	0.8469	0.0402	0.0671	0.1927
Result	Diff (1-2)		-0.668	-0.464	-0.26	0.0946	0.14	0.2682

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.03	0.6501	0.8246
Result	Diff (1-2)	0.0885		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.24	0.0008
Result	Satterthwaite	Unequal	5.02	-5.24	0.0033

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.71	0.0730

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.3511	0.7007	1.0502	0.1687	0.2815	0.8089
Result	Diff (1-2)		-0.749	-0.401	-0.053	0.1612	0.2387	0.4573

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.1259	0.4205	1.1734
Result	Diff (1-2)	0.151		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.66	0.0290
Result	Satterthwaite	Unequal	6.94	-2.66	0.0330

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.28	0.4435

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.5875	0.8235	1.0596	0.1139	0.1901	0.5462
Result	Diff (1-2)		-0.798	-0.524	-0.249	0.1271	0.1882	0.3605

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.085	0.5892	1.1124
Result	Diff (1-2)	0.119		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.40	0.0023
Result	Satterthwaite	Unequal	8	-4.40	0.0023

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.04	0.9698

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.5576	0.7296	0.9016	0.083	0.1385	0.3981
Result	Diff (1-2)		-0.669	-0.43	-0.19	0.1109	0.1642	0.3145

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.062	0.5808	0.9263
Result	Diff (1-2)	0.1038		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.14	0.0033
Result	Satterthwaite	Unequal	7.39	-4.14	0.0039

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.81	0.5804

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.7391	0.9181	1.0972	0.0864	0.1442	0.4143
Result	Diff (1-2)		-0.861	-0.618	-0.375	0.1125	0.1666	0.3191

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0645	0.7246	1.0432
Result	Diff (1-2)	0.1053		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.87	0.0004
Result	Satterthwaite	Unequal	7.53	-5.87	0.0005

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.67	0.6319

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0686	0.2999	0.5312	0.1116	0.1863	0.5353
Result	Test	5	0.352	0.4684	0.5848	0.0562	0.0938	0.2694
Result	Diff (1-2)		-0.384	-0.169	0.0465	0.0996	0.1475	0.2825

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0833	0	0.4841
Result	Test	0.0419	0.3304	0.5597
Result	Diff (1-2)	0.0933		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.81	0.1084
Result	Satterthwaite	Unequal	5.9	-1.81	0.1216

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.95	0.2121

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.5308	0.8509	1.171	0.1544	0.2578	0.7407
Result	Diff (1-2)		-0.883	-0.565	-0.247	0.1473	0.2181	0.4178

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.1153	0.5939	1.2047
Result	Diff (1-2)	0.1379		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.10	0.0034
Result	Satterthwaite	Unequal	6.91	-4.10	0.0047

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.32	0.4356

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.2336	0.4907	0.7478	0.1241	0.2071	0.5951
Result	Diff (1-2)		-0.481	-0.205	0.0707	0.1278	0.1891	0.3624

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0926	0.2251	0.7907
Result	Diff (1-2)	0.1196		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.71	0.1247
Result	Satterthwaite	Unequal	7.7	-1.71	0.1262

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.50	0.7060

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3982	0.7205	1.0428	0.1555	0.2596	0.7459
Result	Diff (1-2)		-0.755	-0.435	-0.115	0.148	0.2191	0.4198

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.1161	0.5017	1.117
Result	Diff (1-2)	0.1386		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.14	0.0138
Result	Satterthwaite	Unequal	6.88	-3.14	0.0168

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.35	0.4282

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.5255	0.5997	0.6739	0.0358	0.0598	0.1717
Result	Diff (1-2)		-0.499	-0.314	-0.129	0.0858	0.127	0.2432

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0267	0.5184	0.6723
Result	Diff (1-2)	0.0803		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.91	0.0045
Result	Satterthwaite	Unequal	4.98	-3.91	0.0114

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	8.03	0.0682

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3426	0.466	0.5894	0.0596	0.0994	0.2857
Result	Diff (1-2)		-0.383	-0.18	0.0221	0.0938	0.1388	0.266

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0445	0.3607	0.6092
Result	Diff (1-2)	0.0878		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.05	0.0740
Result	Satterthwaite	Unequal	6.46	-2.05	0.0823

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.90	0.3269

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3678	0.5883	0.8089	0.1064	0.1776	0.5103
Result	Diff (1-2)		-0.556	-0.303	-0.05	0.1172	0.1735	0.3324

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0794	0.4583	0.8912
Result	Diff (1-2)	0.1097		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.76	0.0247
Result	Satterthwaite	Unequal	7.98	-2.76	0.0248

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.10	0.9285

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.2901	0.3498	0.4095	0.0288	0.0481	0.1382
Result	Diff (1-2)		-0.246	-0.064	0.1173	0.0841	0.1245	0.2384

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0215	0.2836	0.4117
Result	Diff (1-2)	0.0787		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.82	0.4383
Result	Satterthwaite	Unequal	4.64	-0.82	0.4545

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	12.40	0.0318

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3661	0.4518	0.5374	0.0413	0.069	0.1983
Result	Diff (1-2)		-0.355	-0.166	0.0224	0.0873	0.1293	0.2477

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0309	0.3766	0.5469
Result	Diff (1-2)	0.0818		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.03	0.0766
Result	Satterthwaite	Unequal	5.29	-2.03	0.0947

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.02	0.1102

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.6001	0.7013	0.8024	0.0488	0.0815	0.2341
Result	Diff (1-2)		-0.609	-0.416	-0.222	0.0897	0.1329	0.2545

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0364	0.5978	0.8192
Result	Diff (1-2)	0.084		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.95	0.0011
Result	Satterthwaite	Unequal	5.76	-4.95	0.0029

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.32	0.1855

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3982	0.4983	0.5985	0.0483	0.0807	0.2318
Result	Diff (1-2)		-0.406	-0.213	-0.019	0.0896	0.1326	0.2541

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0361	0.397	0.5785
Result	Diff (1-2)	0.0839		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.54	0.0349
Result	Satterthwaite	Unequal	5.73	-2.54	0.0461

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.41	0.1800

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3388	0.665	0.9912	0.1574	0.2627	0.755
Result	Diff (1-2)		-0.702	-0.379	-0.057	0.1493	0.221	0.4234

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.1175	0.4672	1.0905
Result	Diff (1-2)	0.1398		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.71	0.0265
Result	Satterthwaite	Unequal	6.83	-2.71	0.0307

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.41	0.4156

11:06 Wednesday, September 10, 2008

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.504	0.6489	0.7937	0.0699	0.1167	0.3352
Result	Diff (1-2)		-0.575	-0.363	-0.151	0.0982	0.1454	0.2785

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0522	0.5101	0.8085
Result	Diff (1-2)	0.092		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.95	0.0042
Result	Satterthwaite	Unequal	7.1	-3.95	0.0054

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.11	0.4882

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.2486	0.3742	0.4998	0.0606	0.1012	0.2907
Result	Diff (1-2)		-0.292	-0.089	0.1148	0.0942	0.1395	0.2672

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0452	0.2769	0.489
Result	Diff (1-2)	0.0882		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.00	0.3446
Result	Satterthwaite	Unequal	6.53	-1.00	0.3510

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.80	0.3424

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.0753	0.2856	0.4958	0.1014	0.1693	0.4866
Result	Test	5	0.3375	0.5315	0.7255	0.0936	0.1562	0.449
Result	Diff (1-2)		-0.484	-0.246	-0.008	0.11	0.1629	0.3121

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0757	0	0.4117
Result	Test	0.0699	0.3766	0.7872
Result	Diff (1-2)	0.103		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.39	0.0441
Result	Satterthwaite	Unequal	7.95	-2.39	0.0443

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.17	0.8799

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.1715	0.59	1.0084	0.2019	0.337	0.9685
Result	Diff (1-2)		-0.636	-0.252	0.1324	0.1778	0.2633	0.5044

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.1507	0.2252	1.0849
Result	Diff (1-2)	0.1665		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.51	0.1693
Result	Satterthwaite	Unequal	5.68	-1.51	0.1843

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.53	0.1724

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.1433	0.423	0.7027	0.135	0.2252	0.6472
Result	Diff (1-2)		-0.369	-0.085	0.1993	0.1315	0.1947	0.3729

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.1007	0.1046	0.7363
Result	Diff (1-2)	0.1231		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.69	0.5112
Result	Satterthwaite	Unequal	7.18	-0.69	0.5134

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.02	0.5113

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.0619	0.2763	0.4906	0.1034	0.1726	0.4961
Result	Diff (1-2)		-0.179	0.0621	0.3037	0.1119	0.1656	0.3173

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.0772	0	0.4754
Result	Diff (1-2)	0.1048		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.59	0.5696
Result	Satterthwaite	Unequal	7.94	0.59	0.5697

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.19	0.8705

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	-0.04	0.1734	0.3871	0.1031	0.1721	0.4945
Result	Diff (1-2)		-0.076	0.1649	0.4061	0.1117	0.1653	0.3168

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.077	0	0.3992
Result	Diff (1-2)	0.1046		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.58	0.1534
Result	Satterthwaite	Unequal	7.94	1.58	0.1536

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.18	0.8752

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.2386	0.3963	0.5541	0.0761	0.127	0.3651
Result	Diff (1-2)		-0.267	-0.058	0.1514	0.0969	0.1435	0.275

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.0568	0.1752	0.4849
Result	Diff (1-2)	0.0908		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.64	0.5409
Result	Satterthwaite	Unequal	7.64	-0.64	0.5417

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.55	0.6804

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.1783	0.6585	1.1387	0.2317	0.3867	1.1113
Result	Diff (1-2)		-0.751	-0.32	0.1108	0.1996	0.2955	0.5661

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.173	0.3093	1.2601
Result	Diff (1-2)	0.1869		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.71	0.1250
Result	Satterthwaite	Unequal	5.3	-1.71	0.1440

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.97	0.1117

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.9399	1.0983	1.2567	0.0764	0.1276	0.3666
Result	Diff (1-2)		-0.97	-0.76	-0.55	0.0971	0.1438	0.2754

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.0571	0.9009	1.2281
Result	Diff (1-2)	0.0909		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-8.36	<.0001
Result	Satterthwaite	Unequal	7.65	-8.36	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.54	0.6862

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.3402	0.4928	0.6455	0.0737	0.1229	0.3533
Result	Diff (1-2)		-0.361	-0.154	0.0522	0.0957	0.1417	0.2715

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.055	0.3882	0.693
Result	Diff (1-2)	0.0896		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.72	0.1231
Result	Satterthwaite	Unequal	7.54	-1.72	0.1255

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.66	0.6363

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.3732	0.5081	0.643	0.0651	0.1086	0.3122
Result	Diff (1-2)		-0.368	-0.17	0.0283	0.0917	0.1358	0.2601

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.0486	0.3882	0.6611
Result	Diff (1-2)	0.0859		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.98	0.0834
Result	Satterthwaite	Unequal	7.08	-1.98	0.0881

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.12	0.4837

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.4688	0.9646	1.4603	0.2392	0.3993	1.1473
Result	Diff (1-2)		-1.069	-0.626	-0.183	0.2051	0.3037	0.5818

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.1786	0.5218	1.3439
Result	Diff (1-2)	0.1921		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.26	0.0115
Result	Satterthwaite	Unequal	5.23	-3.26	0.0210

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.36	0.1007

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.5223	0.8034	1.0845	0.1356	0.2264	0.6505
Result	Diff (1-2)		-0.75	-0.465	-0.18	0.1319	0.1953	0.3742

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.1012	0.456	1.0085
Result	Diff (1-2)	0.1235		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.76	0.0055
Result	Satterthwaite	Unequal	7.16	-3.76	0.0068

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.05	0.5053

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	0.1418	0.3384	0.5349	0.0948	0.1583	0.4549
Result	Test	5	0.2543	0.397	0.5397	0.0689	0.1149	0.3303
Result	Diff (1-2)		-0.26	-0.059	0.1431	0.0934	0.1383	0.265

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0708	0.1046	0.5173
Result	Test	0.0514	0.2814	0.5658
Result	Diff (1-2)	0.0875		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.67	0.5218
Result	Satterthwaite	Unequal	7.3	-0.67	0.5236

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.90	0.5504

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	0.0915	0.3222	0.5529	0.1113	0.1858	0.534
Result	Diff (1-2)		-0.422	-0.171	0.0801	0.1162	0.172	0.3296

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0831	0	0.4509
Result	Diff (1-2)	0.1088		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.57	0.1550
Result	Satterthwaite	Unequal	7.78	-1.57	0.1560

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.40	0.7525

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	-0.11	0.0619	0.2338	0.083	0.1385	0.3979
Result	Diff (1-2)		-0.127	0.0894	0.3053	0.1	0.1481	0.2836

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0619	0	0.3096
Result	Diff (1-2)	0.0936		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.95	0.3676
Result	Satterthwaite	Unequal	7.88	0.95	0.3680

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.29	0.8129

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC01A-A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	0.0805	0.2995	0.5185	0.1057	0.1764	0.5068
Result	Diff (1-2)		-0.392	-0.148	0.0954	0.1128	0.167	0.3199

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0789	0	0.412
Result	Diff (1-2)	0.1056		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.40	0.1982
Result	Satterthwaite	Unequal	7.89	-1.40	0.1987

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.26	0.8276

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC01A-U -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	0.0682	0.2864	0.5046	0.1053	0.1757	0.505
Result	Diff (1-2)		-0.378	-0.135	0.108	0.1126	0.1667	0.3193

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0786	0	0.4772
Result	Diff (1-2)	0.1054		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.28	0.2360
Result	Satterthwaite	Unequal	7.9	-1.28	0.2364

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.25	0.8330

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	0.2467	0.3531	0.4594	0.0513	0.0857	0.2462
Result	Diff (1-2)		-0.386	-0.202	-0.017	0.0854	0.1265	0.2424

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0383	0.2364	0.4562
Result	Diff (1-2)	0.08		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.52	0.0357
Result	Satterthwaite	Unequal	6.19	-2.52	0.0440

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.36	0.2673

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	0.4586	0.5868	0.7149	0.0618	0.1032	0.2966
Result	Diff (1-2)		-0.629	-0.435	-0.242	0.0898	0.1329	0.2546

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0462	0.4772	0.7326
Result	Diff (1-2)	0.084		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.18	0.0008
Result	Satterthwaite	Unequal	6.91	-5.18	0.0013

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.32	0.4361

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	0.8197	1.0033	1.1869	0.0886	0.1478	0.4248
Result	Diff (1-2)		-1.074	-0.852	-0.63	0.103	0.1525	0.2922

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0661	0.7833	1.1474
Result	Diff (1-2)	0.0965		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-8.83	<.0001
Result	Satterthwaite	Unequal	7.97	-8.83	<.0001

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.13	0.9095

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	-0.018	0.026	0.0702	0.0213	0.0356	0.1023
Result	Diff (1-2)		-0.041	0.1253	0.2914	0.0769	0.1139	0.2182

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0159	0	0.065
Result	Diff (1-2)	0.072		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.74	0.1200
Result	Satterthwaite	Unequal	4.41	1.74	0.1501

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	19.46	0.0139

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF02A	5	-0.044	0.1513	0.3464	0.0941	0.1571	0.4513
Result	Test	5	-0.033	0.0184	0.0695	0.0246	0.0411	0.1182
Result	Diff (1-2)		-0.035	0.1329	0.3004	0.0775	0.1148	0.2199

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF02A	0.0702	0	0.3168
Result	Test	0.0184	0	0.092
Result	Diff (1-2)	0.0726		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.83	0.1045
Result	Satterthwaite	Unequal	4.55	1.83	0.1324

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	14.57	0.0237

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IE09A -----

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
REF02A	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.

Kruskal-Wallis Test

Chi-Square 6.8182

DF 1

Pr > Chi-Square 0.0090

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH06A -----

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
REF02A	5	15.0	27.50	4.772607	3.0
Test	5	40.0	27.50	4.772607	8.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 15.0000

Normal Approximation

Z -2.5143

One-Sided Pr < Z 0.0060

Two-Sided Pr > |Z| 0.0119

t Approximation

One-Sided Pr < Z 0.0165

Two-Sided Pr > |Z| 0.0331

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 6.8598

DF 1

Pr > Chi-Square 0.0088

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-1.431	-0.74	-0.049	0.3336	0.5567	1.5998
rankit	Test	5	0.0489	0.7401	1.4314	0.3336	0.5567	1.5998
rankit	Diff (1-2)		-2.292	-1.48	-0.668	0.376	0.5567	1.0666

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.249	-1.547	-0.123
rankit	Test	0.249	0.1226	1.5466
rankit	Diff (1-2)	0.3521		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	-4.20	0.0030
rankit	Satterthwaite	Unequal	8	-4.20	0.0030

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	1.00	1.0000

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
rankit	REF02A	5	-0.652	0.4575	1.5672	0.5354	0.8937	2.5681
rankit	Test	5	-0.458	-0.458	-0.458	.	0	.
rankit	Diff (1-2)		-0.007	0.915	1.8367	0.4268	0.6319	1.2106

Statistics

Variable	group	Std Err	Minimum	Maximum
rankit	REF02A	0.3997	-0.458	1.5466
rankit	Test	0	-0.458	-0.458
rankit	Diff (1-2)	0.3997		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
rankit	Pooled	Equal	8	2.29	0.0513
rankit	Satterthwaite	Unequal	4	2.29	0.0839

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
rankit	Folded F	4	4	Infty	<.0001

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=BA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.7386	0.9267	1.1147	0.0907	0.1515	0.4352
Result	Diff (1-2)		-0.561	-0.381	-0.202	0.0832	0.1232	0.2359

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0677	0.7323	1.0933
Result	Diff (1-2)	0.0779		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.89	0.0012
Result	Satterthwaite	Unequal	6.34	-4.89	0.0023

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.10	0.2986

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=BL06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.6978	0.9013	1.1047	0.0982	0.1638	0.4708
Result	Diff (1-2)		-0.547	-0.356	-0.165	0.0884	0.1308	0.2507

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0733	0.7129	1.1172
Result	Diff (1-2)	0.0827		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.30	0.0026
Result	Satterthwaite	Unequal	6.05	-4.30	0.0050

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.63	0.2396

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=EH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.4	0.5258	0.6516	0.0607	0.1013	0.2912
Result	Diff (1-2)		-0.117	0.0196	0.1567	0.0635	0.094	0.18

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0453	0.4307	0.6699
Result	Diff (1-2)	0.0594		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.33	0.7497
Result	Satterthwaite	Unequal	7.79	0.33	0.7499

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.39	0.7579

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.4431	0.5375	0.6318	0.0455	0.076	0.2183
Result	Diff (1-2)		-0.11	0.008	0.1263	0.0548	0.0811	0.1554

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.034	0.4604	0.6501
Result	Diff (1-2)	0.0513		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.16	0.8806
Result	Satterthwaite	Unequal	7.88	0.16	0.8807

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.28	0.8162

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FT06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.4734	0.61	0.7467	0.0659	0.1101	0.3163
Result	Diff (1-2)		-0.209	-0.065	0.0794	0.0667	0.0988	0.1892

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0492	0.4555	0.7052
Result	Diff (1-2)	0.0625		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.03	0.3313
Result	Satterthwaite	Unequal	7.56	-1.03	0.3330

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.64	0.6442

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=FT11A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.516	0.6619	0.8077	0.0704	0.1175	0.3375
Result	Diff (1-2)		-0.267	-0.116	0.0337	0.0695	0.1029	0.1972

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0525	0.5293	0.8285
Result	Diff (1-2)	0.0651		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.79	0.1114
Result	Satterthwaite	Unequal	7.33	-1.79	0.1149

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.87	0.5605

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.6672	0.7151	0.763	0.0231	0.0386	0.1109
Result	Diff (1-2)		-0.267	-0.17	-0.072	0.045	0.0666	0.1277

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0173	0.6581	0.7631
Result	Diff (1-2)	0.0421		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.03	0.0038
Result	Satterthwaite	Unequal	5.55	-4.03	0.0081

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.97	0.1497

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.6229	0.7514	0.88	0.062	0.1035	0.2975
Result	Diff (1-2)		-0.345	-0.206	-0.067	0.0643	0.0952	0.1823

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0463	0.6461	0.9183
Result	Diff (1-2)	0.0602		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.42	0.0091
Result	Satterthwaite	Unequal	7.74	-3.42	0.0095

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.45	0.7277

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.596	0.8148	1.0336	0.1056	0.1762	0.5064
Result	Diff (1-2)		-0.472	-0.269	-0.067	0.0937	0.1387	0.2656

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0788	0.5933	0.9959
Result	Diff (1-2)	0.0877		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.07	0.0153
Result	Satterthwaite	Unequal	5.8	-3.07	0.0228

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.20	0.1935

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE14A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.5815	0.8722	1.1629	0.1403	0.2341	0.6727
Result	Diff (1-2)		-0.584	-0.327	-0.07	0.1191	0.1763	0.3378

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.1047	0.5933	1.2306
Result	Diff (1-2)	0.1115		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.93	0.0190
Result	Satterthwaite	Unequal	5.06	-2.93	0.0322

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	7.41	0.0781

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=IE15A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.6433	0.8392	1.035	0.0945	0.1577	0.4533
Result	Diff (1-2)		-0.479	-0.294	-0.108	0.0858	0.127	0.2434

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0705	0.6935	1.0933
Result	Diff (1-2)	0.0803		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.66	0.0064
Result	Satterthwaite	Unequal	6.18	-3.66	0.0101

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.37	0.2668

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=KP05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.6803	0.7636	0.8469	0.0402	0.0671	0.1927
Result	Diff (1-2)		-0.331	-0.218	-0.106	0.0521	0.0771	0.1477

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.03	0.6501	0.8246
Result	Diff (1-2)	0.0488		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.47	0.0021
Result	Satterthwaite	Unequal	7.55	-4.47	0.0024

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.64	0.6421

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=KP06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.3511	0.7007	1.0502	0.1687	0.2815	0.8089
Result	Diff (1-2)		-0.459	-0.155	0.1483	0.1406	0.2081	0.3987

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.1259	0.4205	1.1734
Result	Diff (1-2)	0.1316		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.18	0.2721
Result	Satterthwaite	Unequal	4.74	-1.18	0.2940

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	10.72	0.0412

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.5875	0.8235	1.0596	0.1139	0.1901	0.5462
Result	Diff (1-2)		-0.493	-0.278	-0.063	0.0996	0.1475	0.2826

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.085	0.5892	1.1124
Result	Diff (1-2)	0.0933		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.98	0.0176
Result	Satterthwaite	Unequal	5.57	-2.98	0.0269

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.89	0.1536

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----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.5576	0.7296	0.9016	0.083	0.1385	0.3981
Result	Diff (1-2)		-0.352	-0.184	-0.016	0.0779	0.1153	0.2209

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.062	0.5808	0.9263
Result	Diff (1-2)	0.0729		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.53	0.0355
Result	Satterthwaite	Unequal	6.68	-2.53	0.0410

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.60	0.3779

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=MA06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.7391	0.9181	1.0972	0.0864	0.1442	0.4143
Result	Diff (1-2)		-0.546	-0.373	-0.2	0.0802	0.1187	0.2274

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0645	0.7246	1.0432
Result	Diff (1-2)	0.0751		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.96	0.0011
Result	Satterthwaite	Unequal	6.53	-4.96	0.0020

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.81	0.3407

----- Test=Larval Batch 1 Endpoint=Percent Combined Mortality Treatment=0H02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.4387	0.5454	0.6522	0.0515	0.086	0.2471
Result	Test	5	0.352	0.4684	0.5848	0.0562	0.0938	0.2694
Result	Diff (1-2)		-0.054	0.077	0.2082	0.0608	0.09	0.1723

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0385	0.4257	0.6581
Result	Test	0.0419	0.3304	0.5597
Result	Diff (1-2)	0.0569		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.35	0.2128
Result	Satterthwaite	Unequal	7.94	1.35	0.2131

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.19	0.8709

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.5308	0.8509	1.171	0.1544	0.2578	0.7407
Result	Diff (1-2)		-0.796	-0.508	-0.22	0.1334	0.1976	0.3785

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.1153	0.5939	1.2047
Result	Diff (1-2)	0.1249		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.07	0.0036
Result	Satterthwaite	Unequal	5.36	-4.07	0.0084

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.72	0.1196

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.2336	0.4907	0.7478	0.1241	0.2071	0.5951
Result	Diff (1-2)		-0.389	-0.148	0.0928	0.1115	0.1651	0.3162

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0926	0.2251	0.7907
Result	Diff (1-2)	0.1044		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.42	0.1942
Result	Satterthwaite	Unequal	6.02	-1.42	0.2061

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.69	0.2337

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3982	0.7205	1.0428	0.1555	0.2596	0.7459
Result	Diff (1-2)		-0.668	-0.378	-0.088	0.1342	0.1987	0.3807

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.1161	0.5017	1.117
Result	Diff (1-2)	0.1257		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-3.01	0.0169
Result	Satterthwaite	Unequal	5.34	-3.01	0.0276

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.80	0.1170

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=BL04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.5255	0.5997	0.6739	0.0358	0.0598	0.1717
Result	Diff (1-2)		-0.384	-0.257	-0.13	0.0589	0.0871	0.1669

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0267	0.5184	0.6723
Result	Diff (1-2)	0.0551		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.66	0.0016
Result	Satterthwaite	Unequal	6.25	-4.66	0.0031

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.25	0.2799

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=EI07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3426	0.466	0.5894	0.0596	0.0994	0.2857
Result	Diff (1-2)		-0.274	-0.123	0.028	0.07	0.1037	0.1986

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0445	0.3607	0.6092
Result	Diff (1-2)	0.0656		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.88	0.0970
Result	Satterthwaite	Unequal	7.95	-1.88	0.0972

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.18	0.8795

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----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=FT01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3678	0.5883	0.8089	0.1064	0.1776	0.5103
Result	Diff (1-2)		-0.46	-0.246	-0.031	0.0992	0.1469	0.2814

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0794	0.4583	0.8912
Result	Diff (1-2)	0.0929		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.64	0.0296
Result	Satterthwaite	Unequal	6.59	-2.64	0.0351

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.72	0.3565

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=FT04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.2901	0.3498	0.4095	0.0288	0.0481	0.1382
Result	Diff (1-2)		-0.129	-0.007	0.1147	0.0564	0.0834	0.1599

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0215	0.2836	0.4117
Result	Diff (1-2)	0.0528		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.13	0.8977
Result	Satterthwaite	Unequal	5.53	-0.13	0.8991

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.02	0.1472

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IE09A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.6567	0.7256	0.7945	0.0332	0.0555	0.1594
Result	Diff (1-2)		-0.508	-0.383	-0.258	0.0579	0.0857	0.1642

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0248	0.6796	0.8192
Result	Diff (1-2)	0.0542		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-7.06	0.0001
Result	Satterthwaite	Unequal	5.98	-7.06	0.0004

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.77	0.2267

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3661	0.4518	0.5374	0.0413	0.069	0.1983
Result	Diff (1-2)		-0.241	-0.109	0.023	0.0611	0.0905	0.1733

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0309	0.3766	0.5469
Result	Diff (1-2)	0.0572		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.90	0.0934
Result	Satterthwaite	Unequal	6.81	-1.90	0.0998

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.44	0.4091

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.6575	0.7134	0.7694	0.027	0.0451	0.1295
Result	Diff (1-2)		-0.491	-0.371	-0.25	0.0558	0.0826	0.1582

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0202	0.6723	0.7907
Result	Diff (1-2)	0.0522		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-7.10	0.0001
Result	Satterthwaite	Unequal	5.36	-7.10	0.0006

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.72	0.1198

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.6001	0.7013	0.8024	0.0488	0.0815	0.2341
Result	Diff (1-2)		-0.498	-0.358	-0.219	0.0645	0.0955	0.183

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0364	0.5978	0.8192
Result	Diff (1-2)	0.0604		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.93	0.0003
Result	Satterthwaite	Unequal	7.45	-5.93	0.0005

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.75	0.6013

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3982	0.4983	0.5985	0.0483	0.0807	0.2318
Result	Diff (1-2)		-0.294	-0.156	-0.017	0.0643	0.0952	0.1823

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0361	0.397	0.5785
Result	Diff (1-2)	0.0602		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.58	0.0324
Result	Satterthwaite	Unequal	7.41	-2.58	0.0345

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.78	0.5885

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=IH06A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.5839	0.6416	0.6993	0.0279	0.0465	0.1336
Result	Diff (1-2)		-0.42	-0.299	-0.178	0.0561	0.083	0.159

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0208	0.5628	0.6796
Result	Diff (1-2)	0.0525		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.69	0.0005
Result	Satterthwaite	Unequal	5.44	-5.69	0.0018

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.37	0.1323

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3388	0.665	0.9912	0.1574	0.2627	0.755
Result	Diff (1-2)		-0.615	-0.322	-0.029	0.1356	0.2008	0.3847

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.1175	0.4672	1.0905
Result	Diff (1-2)	0.127		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.54	0.0349
Result	Satterthwaite	Unequal	5.31	-2.54	0.0493

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.94	0.1125

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.504	0.6489	0.7937	0.0699	0.1167	0.3352
Result	Diff (1-2)		-0.47	-0.306	-0.142	0.0759	0.1123	0.2151

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0522	0.5101	0.8085
Result	Diff (1-2)	0.071		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.31	0.0026
Result	Satterthwaite	Unequal	7.95	-4.31	0.0026

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.17	0.8816

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=KP03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.2486	0.3742	0.4998	0.0606	0.1012	0.2907
Result	Diff (1-2)		-0.184	-0.031	0.121	0.0706	0.1045	0.2002

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0452	0.2769	0.489
Result	Diff (1-2)	0.0661		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.47	0.6476
Result	Satterthwaite	Unequal	7.97	-0.47	0.6476

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.13	0.9055

----- Test=Larval Batch 2 Endpoint=Percent Combined Mortality Treatment=MA01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.209	0.3428	0.4766	0.0646	0.1078	0.3097
Result	Test	5	0.3375	0.5315	0.7255	0.0936	0.1562	0.449
Result	Diff (1-2)		-0.384	-0.189	0.007	0.0907	0.1342	0.2571

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0482	0.1799	0.4716
Result	Test	0.0699	0.3766	0.7872
Result	Diff (1-2)	0.0849		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.22	0.0569
Result	Satterthwaite	Unequal	7.1	-2.22	0.0610

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.10	0.4895

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=C002A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.1715	0.59	1.0084	0.2019	0.337	0.9685
Result	Diff (1-2)		-0.375	0.0188	0.4121	0.1822	0.2697	0.5166

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.1507	0.2252	1.0849
Result	Diff (1-2)	0.1706		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.11	0.9149
Result	Satterthwaite	Unequal	6.08	0.11	0.9158

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	3.56	0.2459

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D003A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129		
Result	Test	5	0.1433	0.423	0.7027	0.135	0.2252	0.6472		
Result	Diff (1-2)		-0.111	0.1858	0.4822	0.1373	0.2032	0.3893		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.1007	0.1046	0.7363
Result	Diff (1-2)	0.1285		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.45	0.1864
Result	Satterthwaite	Unequal	7.6	1.45	0.1883

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.59	0.6632

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129		
Result	Test	5	0.0619	0.2763	0.4906	0.1034	0.1726	0.4961		
Result	Diff (1-2)		0.0764	0.3325	0.5886	0.1186	0.1756	0.3364		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.0772	0	0.4754
Result	Diff (1-2)	0.1111		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.99	0.0172
Result	Satterthwaite	Unequal	7.99	2.99	0.0172

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.07	0.9500

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=D005A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL		Upper CL	
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129		
Result	Test	5	-0.04	0.1734	0.3871	0.1031	0.1721	0.4945		
Result	Diff (1-2)		0.1796	0.4353	0.691	0.1184	0.1753	0.3359		

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.077	0	0.3992
Result	Diff (1-2)	0.1109		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.93	0.0044
Result	Satterthwaite	Unequal	7.99	3.93	0.0044

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.08	0.9452

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=EC04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.2386	0.3963	0.5541	0.0761	0.127	0.3651
Result	Diff (1-2)		-0.014	0.2124	0.4384	0.1046	0.1549	0.2968

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.0568	0.1752	0.4849
Result	Diff (1-2)	0.098		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.17	0.0620
Result	Satterthwaite	Unequal	7.22	2.17	0.0656

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.97	0.5263

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.1783	0.6585	1.1387	0.2317	0.3867	1.1113
Result	Diff (1-2)		-0.489	-0.05	0.3895	0.2034	0.3012	0.577

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.173	0.3093	1.2601
Result	Diff (1-2)	0.1905		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.26	0.8005
Result	Satterthwaite	Unequal	5.63	-0.26	0.8032

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.69	0.1634

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED04A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.9399	1.0983	1.2567	0.0764	0.1276	0.3666
Result	Diff (1-2)		-0.716	-0.49	-0.263	0.1048	0.1551	0.2972

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.0571	0.9009	1.2281
Result	Diff (1-2)	0.0981		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-4.99	0.0011
Result	Satterthwaite	Unequal	7.24	-4.99	0.0014

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.96	0.5314

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=ED05A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.3402	0.4928	0.6455	0.0737	0.1229	0.3533
Result	Diff (1-2)		-0.108	0.1159	0.3395	0.1035	0.1533	0.2936

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.055	0.3882	0.693
Result	Diff (1-2)	0.0969		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.20	0.2659
Result	Satterthwaite	Unequal	7.1	1.20	0.2701

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.11	0.4879

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.3732	0.5081	0.643	0.0651	0.1086	0.3122
Result	Diff (1-2)		-0.115	0.1007	0.3162	0.0998	0.1478	0.2831

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.0486	0.3882	0.6611
Result	Diff (1-2)	0.0934		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	1.08	0.3128
Result	Satterthwaite	Unequal	6.61	1.08	0.3192

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.70	0.3593

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.4688	0.9646	1.4603	0.2392	0.3993	1.1473
Result	Diff (1-2)		-0.807	-0.356	0.0952	0.2089	0.3093	0.5925

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.1786	0.5218	1.3439
Result	Diff (1-2)	0.1956		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.82	0.1064
Result	Satterthwaite	Unequal	5.54	-1.82	0.1229

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	5.00	0.1480

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----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=MD03A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.5223	0.8034	1.0845	0.1356	0.2264	0.6505
Result	Diff (1-2)		-0.492	-0.195	0.1027	0.1377	0.2039	0.3905

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.1012	0.456	1.0085
Result	Diff (1-2)	0.1289		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-1.51	0.1696
Result	Satterthwaite	Unequal	7.59	-1.51	0.1716

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.61	0.6564

----- Test=Larval Batch 3 Endpoint=Percent Combined Mortality Treatment=WW01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.3871	0.6088	0.8304	0.1069	0.1785	0.5129
Result	Test	5	0.2543	0.397	0.5397	0.0689	0.1149	0.3303
Result	Diff (1-2)		-0.007	0.2118	0.4307	0.1014	0.1501	0.2876

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0798	0.4046	0.8534
Result	Test	0.0514	0.2814	0.5658
Result	Diff (1-2)	0.0949		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.23	0.0562
Result	Satterthwaite	Unequal	6.83	2.23	0.0618

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.41	0.4147

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=C001A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0.0915	0.3222	0.5529	0.1113	0.1858	0.534
Result	Diff (1-2)		-0.306	-0.014	0.2776	0.1351	0.2001	0.3833

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0831	0	0.4509
Result	Diff (1-2)	0.1265		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.11	0.9136
Result	Satterthwaite	Unequal	7.85	-0.11	0.9136

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.32	0.7950

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=C004A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	-0.11	0.0619	0.2338	0.083	0.1385	0.3979
Result	Diff (1-2)		-0.016	0.2461	0.5084	0.1215	0.1799	0.3446

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0619	0	0.3096
Result	Diff (1-2)	0.1138		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.16	0.0625
Result	Satterthwaite	Unequal	6.86	2.16	0.0681

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.38	0.4226

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC01A-A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0.0805	0.2995	0.5185	0.1057	0.1764	0.5068
Result	Diff (1-2)		-0.277	0.0085	0.294	0.1322	0.1958	0.375

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0789	0	0.412
Result	Diff (1-2)	0.1238		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.07	0.9470
Result	Satterthwaite	Unequal	7.73	0.07	0.9470

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.46	0.7209

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC01A-U -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0.0682	0.2864	0.5046	0.1053	0.1757	0.505
Result	Diff (1-2)		-0.263	0.0216	0.3067	0.132	0.1955	0.3745

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0786	0	0.4772
Result	Diff (1-2)	0.1236		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	0.17	0.8655
Result	Satterthwaite	Unequal	7.72	0.17	0.8657

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	1.47	0.7158

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EC02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0.2467	0.3531	0.4594	0.0513	0.0857	0.2462
Result	Diff (1-2)		-0.282	-0.045	0.1921	0.1098	0.1626	0.3115

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0383	0.2364	0.4562
Result	Diff (1-2)	0.1028		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-0.44	0.6730
Result	Satterthwaite	Unequal	5.26	-0.44	0.6788

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	6.20	0.1049

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----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=EI02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev	Upper CL
			Mean		Mean	Std Dev		Std Dev
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0	0	0	.	0	.
Result	Diff (1-2)		0.0879	0.308	0.5281	0.1019	0.1509	0.2891

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0	0	0
Result	Diff (1-2)	0.0954		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	3.23	0.0121
Result	Satterthwaite	Unequal	4	3.23	0.0321

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	Infty	<.0001

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=IE07A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0.4586	0.5868	0.7149	0.0618	0.1032	0.2966
Result	Diff (1-2)		-0.523	-0.279	-0.034	0.1132	0.1676	0.3211

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0462	0.4772	0.7326
Result	Diff (1-2)	0.106		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-2.63	0.0302
Result	Satterthwaite	Unequal	5.77	-2.63	0.0405

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	4.27	0.1884

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=LA02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	0.8197	1.0033	1.1869	0.0886	0.1478	0.4248
Result	Diff (1-2)		-0.963	-0.695	-0.428	0.124	0.1836	0.3517

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0661	0.7833	1.1474
Result	Diff (1-2)	0.1161		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	-5.99	0.0003
Result	Satterthwaite	Unequal	7.12	-5.99	0.0005

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	2.08	0.4946

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RL01A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL	Lower CL		Upper CL
			Mean	Mean	Mean	Std Dev	Std Dev	Std Dev
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	-0.018	0.026	0.0702	0.0213	0.0356	0.1023
Result	Diff (1-2)		0.0589	0.282	0.5051	0.1033	0.153	0.2931

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0159	0	0.065
Result	Diff (1-2)	0.0968		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.91	0.0194
Result	Satterthwaite	Unequal	4.22	2.91	0.0407

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	35.93	0.0043

----- Test=Larval Batch 4 Endpoint=Percent Combined Mortality Treatment=RL02A -----

The TTEST Procedure

Statistics

Variable	group	N	Lower CL		Upper CL		Lower CL Std Dev	Upper CL Std Dev
			Mean	Mean	Mean	Mean		
Result	REF03A	5	0.043	0.308	0.573	0.1279	0.2134	0.6132
Result	Test	5	-0.033	0.0184	0.0695	0.0246	0.0411	0.1182
Result	Diff (1-2)		0.0655	0.2896	0.5137	0.1038	0.1537	0.2944

Statistics

Variable	group	Std Err	Minimum	Maximum
Result	REF03A	0.0954	0	0.5175
Result	Test	0.0184	0	0.092
Result	Diff (1-2)	0.0972		

T-Tests

Variable	Method	Variances	DF	t Value	Pr > t
Result	Pooled	Equal	8	2.98	0.0176
Result	Satterthwaite	Unequal	4.3	2.98	0.0372

Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
Result	Folded F	4	4	26.91	0.0075