# TOXICOLOGICAL EVALUATION OF SEDIMENT SAMPLES

**Gowanus Canal Superfund Site**
**Brooklyn, New York**
**Phase 3 Investigation - Bioassay Testing**
**Agreement Number 0000092848**

28 Day *Nereis virens*
Survival and Growth Toxicity Tests

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## 1.0 INTRODUCTION

This report presents the results of toxicity tests carried out on sediment samples collected from the Gowanus Canal Superfund Site in Brooklyn, New York. Samples were provided by CH2M Hill, Chantilly, Virginia. Biological testing was based on programs and protocols developed by the US EPA ( 2001) and ASTM (2009). Potential toxicological impacts of the sediment were determined by conducting 28 day toxicity tests with the marine poychaete worm, *Nereis virens*. All testing, toxicological and analytical, was performed at EnviroSystems, Incorporated (ESI), Hampton, New Hampshire.

Toxicity tests expose groups of organisms to environmental samples, a laboratory control and field reference sites for a specified period to assess potential impacts on a variety of endpoints, such as survival, growth or reproduction. Analysis of variance techniques are used to determine the relative toxicity of the samples as compared to the laboratory control and/or field reference sites. Endpoints for this study were survival and growth (measured as wet weight).

## 2.0 MATERIALS AND METHODS

### 2.1 General Methods, Biological Evaluations

Toxicological and analytical protocols used in this program follow procedures established by the U.S. EPA and U.S. Army Corps of Engineers (U.S. ACE) for testing of dredged material, as well as procedures outlined in *Standard Guide for Conducting Sediment Toxicity Test with Polychaetous Annelids* (ASTM 2009). These protocols provide standard approaches for physical and chemical analyses and for the evaluation of toxicological effects of sediments on aquatic invertebrates.

### 2.2 Test Species

Adult *N. virens* were obtained from ARO. Worms were collected in the field from the Damariscotta River in Boothbay Harbor, Maine and shipped to ARO. Damaged and inactive worms were not used in the assay.

### 2.3 Test Samples

Sediment samples collected from the Gowanus Canal Superfund Site were received at ESI under chain of custody. Once received, samples were inspected to determine integrity, given unique sample numbers and logged into the laboratory sample management database. Once logged in, the samples were placed in a secure refrigerated, 2 - 4 °C, storage area. A listing of sample sites, sample collection, and receipt information is summarized in Table 4.

Control sediment used in the worm assay was a natural marine sediment collected from Hampton Estuary in Hampton, NH, which was sieved to remove large debris and allow for inspection for other living organisms.

Overyling seawater was also obtained from the Hampton Estuary. Water from the estuary has been used for the culture and maintenance of test organisms at ESI since 1978. Seawater is obtained through a filter system located on the bottom of the estuary at a point approximately 1 mile from the open ocean. The water is classified as SA-1.

### 2.4 *N. virens* 28 Day Survival and Growth Toxicity Tests

The 28 day worm sediment tests were conducted according to the methods provided in ASTM (2009) and US EPA (2001). Endpoints measured at the completion of the assay were survival and growth. Growth was measured as wet weight and wet biomass.

Test vessels were 10 liter glass aquaria containing 1.5 liters of sediment and approximately 3.8 liters of overlying water. Aquaria were fitted with overflow spouts to allow for renewal of the overlying water. Static renewal of the overlying water provided approximately 5 volume additions of water/day to each aquarium. Test chambers were randomly placed after addition of test sediments. Placement locations for test chambers were generated by the CETIS® software program. The randomization work sheets are included in the data appendix. Vessels were maintained at 13±3°C in a temperature controlled room during the test. Temperature was recorded hourly using a temperature logger placed in a surrogate vessel. Salinity limits were established at 30±2‰. The photoperiod in the test chamber was set at 16:8 hour light:dark. Lighting was supplied by cool white fluorescent bulbs.

A total of 10 worms were randomly selected from the pool of organisms and added to each tank. Eight replicates were used for each treatment. Sediment and overlying water were added to the test vessels at least 24 hours prior to the addition of test organisms.

A daily observation record was maintained for test chambers. Mortalities and unusual behavior were recorded. If mortalities were observed the body was removed from the test chamber. The dissolved oxygen, pH, salinity, specific conductivity and temperature in the overlying water was measured in all tanks daily. Organisms were fed chopped clam on day 7 and chopped algae on days 14 and 21.

After 28 days exposure, the organisms were recovered from the sediments and counted. All living organisms were transferred to clean test vessels and maintained in clean seawater for 24 hours to allow for removal of sediment from the animals' digestive tract. After the depuration period, organisms were then weighed to the nearest 0.01 mg. The mean wet weight of surviving organisms was determined to assess growth. Organisms were then transferred to plastic bags and frozen. Frozen tissue samples are being held by ESI for 12 months at the request of the client.

### 2.5 Statistical Analysis

Survival and growth data were analyzed using CETIS® software to determine significant differences between the test sediments and both the associated laboratory control and reference sediments. Data sets were evaluated to determine normality of distribution and homogeneity of sample variance. Data sets were subsequently evaluated using the appropriate parametric or non-parametric Analysis of Variance (ANOVA) statistic. End of assay, Day-28, endpoints for statistical analysis were; survival and growth. Growth was measured as both wet weight and wet biomass. Pair-wise comparisons were made using the appropriate statistical evaluation. Statistical difference was evaluated at $\alpha=0.05$.

### 2.6 Reference Toxicant Evaluation

As part of the laboratory quality control program, reference toxicant evaluations are conducted by ESI on a regular basis for each test species. These results provide relative health and response data while allowing for comparison with historic data sets. Results are summarized in Table 2.

### 2.7 Protocol Deviations

Review of the toxicity testing procedures and resulting data indicate that the salinity deviated from the recommended protocol limits of 30±2‰ during the assay. The maximum salinity range during the assay was 25.79 to 32.43‰. Review of the data documented that out of the 4,176 total readings, 250 of them were greater than 32‰ and only 3 were less than 28‰. These values, while exceeding the specifications in ESI's SOP, are within the acceptability criteria stated in the ASTM method protocol. It is the opinion of the study director that the observed excursions had no significant impact on the outcome of the assay.

**Table 1. Sample Collection and Receipt Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| Sample ID | ESI Code | Sediment Type | Sample Collected Date | Sample Collected Time | Sample Received Date | Sample Received Time |
|---|---|---|---|---|---|---|
| GC-SD303-0.0-0.5 | 19830-001 | site | 06/17/10 | 1425 | 06/19/10 | 1300 |
| GC-SD307A-0.0-0.5 | 19830-002 | site | 06/17/10 | 1650 | 06/19/10 | 1300 |
| GC-SD326-0.0-0.5 | 19830-003 | Reference | 06/17/10 | 1338 | 06/19/10 | 1300 |
| GC-SD309-0.0-0.5 | 19830-004 | site | 06/18/10 | 1015 | 06/19/10 | 1300 |
| GC-SD313-0.0-0.5 | 19830-005 | site | 06/18/10 | 1030 | 06/19/10 | 1300 |
| GC-SD314-0.0-0.5 | 19830-006 | site | 06/18/10 | 1315 | 06/19/10 | 1300 |
| GC-SD315-0.0-0.5 | 19830-007 | site | 06/18/10 | 1240 | 06/19/10 | 1300 |
| GC-SD328-0.0-0.5 | 19830-008 | Reference | 06/18/10 | 0948 | 06/19/10 | 1300 |
| GC-SD330-0.0-0.5 | 19830-009 | Reference | 06/18/10 | 1252 | 06/19/10 | 1300 |
| GC-SD333-0.0-0.5 | 19830-010 | Reference | 06/18/10 | 1121 | 06/19/10 | 1300 |
| GC-SD307B-0.0-0.5 | 19830-011 | site | 06/18/10 | 1555 | 06/19/10 | 1300 |
| GC-SD329-0.0-0.5 | 19830-012 | Reference | 06/18/10 | 1516 | 06/19/10 | 1300 |
| GC-SD324-0.0-0.5 | 19830-013 | site | 06/21/10 | 1250 | 06/22/10 | 1500 |
| GC-SD321-0.0-0.5 | 19830-014 | site | 06/21/10 | 1405 | 06/22/10 | 1500 |
| | | | | | 06/23/10 | 0930 |
| GC-SD319-0.0-0.5 | 19830-015 | site | 06/22/10 | 1040 | 06/23/10 | 0930 |
| GC-SD318-0.0-0.5 | 19830-016 | site | 06/22/10 | 1435 | 06/23/10 | 0930 |
| GC-SD310-0.0-0.5 | 19830-017 | site | 06/24/10 | 0950 | 06/25/10 | 0930 |

**Table 2. Reference Toxicant Evaluation. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| Date | Endpoint | | Value | Historic Mean/ Central Tendency | Acceptable Range | Reference Toxicant |
|---|---|---|---|---|---|---|
| *Nereis virens* | | | | | | |
| 08/07/10 | Survival | LC-50 | 1.81 | 1.23 | 0.198 - 2.252 | Copper (mg/L) |

## 3.0 RESULTS AND DISCUSSION

### 3.1 Laboratory Control and Project Reference Site Performance

Review of the laboratory control data indicates that worm performance for all endpoints exceeded the minimum acceptability criteria specified by protocol. At the end of the assay, mean control survival was 97.5% with a coefficient of variation (CV) of 4.75%. The mean wet weight of surviving worms was 2.908 g/organism. The mean wet weight of 5 replicates of 10 randomly selected worms at the start of the assay was 2.82 g/organism. Minimum acceptable performance for the laboratory control is specified as ≥90% survival on day 28, with no individual replicates below 80% survival. The method does not specify limits for growth.

During daily water quality observations the temperature recorded for the assay had a mean value of12.71°C with a range of 11.34 to 15.46°C. Confirmation temperature data collected in a surrogate replicate documented a mean temperature of 11.5°C with a range of 10.4 to 13.5°C. Test acceptability criteria requires a mean temperature of 13±2°C, with maximum temporary fluctuations of 13±3°C.

**Table 3. Summary of Acceptable Endpoints and Measurements. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| Endpoint / Measurement | Protocol Criteria | | Study 19825 |
|---|---|---|---|
| Survival | lab mean ≥ 90% and no replicates <80% | Mean Survival % | 97.5% |
| | | Minimum Survival % | 90.0% |
| | | Protocol Met | Yes |
| Mean Temperature | 13 ±2°C | daily / hourly | 12.71 / 11.5 |
| | | Protocol Met | Yes / Yes |
| Minimum Temperature | 10°C | daily / hourly | 11.34 / 10.4 |
| | | Protocol Met | Yes / Yes |
| Maximum Temperature | 16°C | daily / hourly | 15.46 / 13.5 |
| | | Protocol Met | Yes / Yes |
| Salinity | 30 ±2‰ | Mean Salinity | 31.12 |
| | | Minimum Salinity | 25.79 |
| | | Maximum Salinity | 32.43 |
| | | Protocol Met | Limits exceeded* |

*See section 2.7 Protocol Deviations for a discussion.

**Table 4. Summary of Project Reference Site Performance. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| Reference Site | ESI Code | Mean Survival (%) | Mean Wet Weight (g) | Mean Wet Biomass (g) |
|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 19830-003 | 85.0% | 3.291 | 2.772 |
| GC-SD328-0.0-0.5 | 19830-008 | 85.0% | 3.052 | 2.582 |
| GC-SD330-0.0-0.5 | 19830-009 | 87.5% | 3.056 | 2.689 |
| GC-SD333-0.0-0.5 | 19830-010 | 85.0% | 3.259 | 2.756 |
| GC-SD329-0.0-0.5 | 19830-012 | 85.0% | 2.647 | 2.251 |

### 3.2 Summary

This program utilized protocols developed by the U.S. EPA and ASTM to assess the potential toxicological impacts that exposure to sediments from the Gowanus Canal Superfund Site would have on invertebrates. Table 5 provides a summary of sample sites that demonstrated a negative effect, based on the finding of statistically significant reduction in an endpoint as compared to the laboratory control or reference site. Tables 6 through 9 provide summaries of assay endpoints and detailed statistical results for each sample location. Laboratory bench sheets, detailed summaries of survival, wet weights and associated statistical support data are included in Appendix A.

## 4.0 LITERATURE CITED


ASTM. 2009. *Standard Guide for Conducting Sediment Toxicity Test with Polychaetous Annelids.* Method E 1611-00 (Reapproved 2007). ASTM Annual Book of Standards, Volume 11.06.

U.S. EPA, U.S. ACE. 1998. *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual (Draft)*. EPA-823-B-94-002, May 1998, 172 pages, plus appendices.

U.S. EPA, U.S. ACE. 1991. *Evaluation of Dredged Material Proposed for Ocean Disposal - Testing Manual.* EPA-503/8-91/001, February 1991, 204 pages.

U.S. EPA 1994.Test Methods for Evaluating Solid Waste Physical/Chemical Methods, US EPA SW 846, Final Update: Method 8081A and 8082.

**Table 5. Summary of Significant Endpoints. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| | | Laboratory Control 19825-000 | | | GC-SD326 19830-003 | | | GC-SD328 19830-008 | | | GC-SD330 19830-009 | | | GC-SD333 19830-010 | | | GC-SD329 19830-012 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | survival | growth | | survival | growth | | survival | growth | | survival | growth | | survival | growth | | survival | growth | |
| Field ID | ESI Code | | wet weight | wet biomass | | wet weight | wet biomass | | wet weight | wet biomass | | wet weight | wet biomass | | wet weight | wet biomass | | wet weight | wet biomass |
| GC-SD326-0.0-0.5 | 19830-003 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD328-0.0-0.5 | 19830-008 | Yes | | | | Yes | | | | | | | | | | | | | |
| GC-SD330-0.0-0.5 | 19830-009 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD333-0.0-0.5 | 19830-010 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD329-0.0-0.5 | 19830-012 | Yes | | Yes | | Yes | Yes | | | | | Yes | | | Yes | Yes | | | |
| GC-SD303-0.0-0.5 | 19830-001 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD307A-0.0-0.5 | 19830-002 | | | | | | | | | | | | | | | | | | |
| GC-SD309-0.0-0.5 | 19830-004 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD313-0.0-0.5 | 19830-005 | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | | |
| GC-SD314-0.0-0.5 | 19830-006 | Yes | | Yes | | | Yes | | | | Yes | | | | | Yes | | | |
| GC-SD315-0.0-0.5 | 19830-007 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | | Yes |
| GC-SD307B-0.0-0.5 | 19830-011 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD324-0.0-0.5 | 19830-013 | Yes | | | | | | | | | | | | | | | | | |
| GC-SD321-0.0-0.5 | 19830-014 | | | | | | | | | | | | | | Yes | | | | |
| GC-SD319-0.0-0.5 | 19830-015 | | | | | Yes | | | | | | | | | Yes | | | | |
| GC-SD318-0.0-0.5 | 19830-016 | Yes | | | | Yes | | | | | | | | | Yes | | | | |
| GC-SD310-0.0-0.5 | 19830-017 | Yes | | | | | | | | | | | | | | | | | |

**Table 6.** ***N. virens*** **Day 28 Survival Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

Day 28 Survival Summary

| Sample ID | ESI Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19825-000 | 8 | 97.50% | 90% | 100% | 4.75% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 85.00% | 60% | 100% | 14.06% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 85.00% | 70% | 100% | 14.06% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 87.50% | 70% | 100% | 13.31% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 85.00% | 70% | 100% | 10.89% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 85.00% | 70% | 100% | 12.58% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 87.50% | 70% | 100% | 11.83% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 93.75% | 80% | 100% | 9.77% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 85.00% | 50% | 100% | 20.86% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 61.25% | 40% | 90% | 31.99% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | 75.00% | 50% | 90% | 17.46% |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | 71.25% | 50% | 90% | 23.05% |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 87.50% | 60% | 100% | 15.87% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 87.50% | 70% | 100% | 11.83% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 92.50% | 80% | 100% | 9.58% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 97.50% | 80% | 100% | 7.25% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 86.25% | 80% | 100% | 10.62% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 83.75% | 80% | 90% | 6.18% |

**Table 6. *N. virens* Day 28 Survival Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

Day 28 Survival Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | ESI Code | Mean | Lab Control 19830-000 p Value | | GC-SD326 19830-003 p Value | | GC-SD328 19830-008 p Value | | GC-SD330 19830-009 p Value | | GC-SD333 19830-010 p Value | | GC-SD329 19830-012 p Value | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Control | 19825-000 | 97.50% | - | - | - | - | - | - | - | - | - | - | - | - |
| GC-SD326-0.0-0.5 | 19830-003 | 85.00% | 0.0048 | Yes | - | - | - | - | - | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | 85.00% | 0.0072 | Yes | 0.5061 | No | - | - | - | - | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | 87.50% | 0.0219 | Yes | 0.6715 | No | 0.6603 | No | - | - | - | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | 85.00% | 0.0017 | Yes | 0.4749 | No | 0.4695 | No | 0.2963 | No | - | - | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | 85.00% | 0.0033 | Yes | 0.4929 | No | 0.4869 | No | 0.3181 | No | 0.5183 | No | - | - |
| GC-SD303-0.0-0.5 | 19830-001 | 87.50% | 0.0116 | Yes | 0.6670 | No | 0.6547 | No | 0.4826 | No | 0.7029 | No | 0.6786 | No |
| GC-SD307A-0.0-0.5 | 19830-002 | 93.75% | 0.2869 | No | 0.9456 | No | 0.9363 | No | 0.8649 | No | 0.9635 | No | 0.9526 | No |
| GC-SD309-0.0-0.5 | 19830-004 | 85.00% | 0.0414 | Yes | 0.5582 | No | 0.5518 | No | 0.4136 | No | 0.5801 | No | 0.5648 | No |
| GC-SD313-0.0-0.5 | 19830-005 | 61.25% | <0.0001 | Yes | 0.0053 | Yes | 0.0061 | Yes | 0.0030 | Yes | 0.0043 | Yes | 0.0048 | Yes |
| GC-SD314-0.0-0.5 | 19830-006 | 75.00% | 0.0001 | Yes | 0.0579 | No | 0.0633 | No | 0.0298 | Yes | 0.0508 | No | 0.0545 | No |
| GC-SD315-0.0-0.5 | 19830-007 | 71.25% | 0.0001 | Yes | 0.0358 | Yes | 0.0391 | Yes | 0.0192 | Yes | 0.0314 | Yes | 0.0337 | Yes |
| GC-SD307B-0.0-0.5 | 19830-011 | 87.50% | 0.0333 | Yes | 0.6778 | No | 0.6673 | No | 0.5160 | No | 0.7076 | No | 0.6875 | No |
| GC-SD324-0.0-0.5 | 19830-013 | 87.50% | 0.0116 | Yes | 0.6670 | No | 0.6547 | No | 0.4826 | No | 0.7029 | No | 0.6786 | No |
| GC-SD321-0.0-0.5 | 19830-014 | 92.50% | 0.0985 | No | 0.9186 | No | 0.9069 | No | 0.8125 | No | 0.9424 | No | 0.9276 | No |
| GC-SD319-0.0-0.5 | 19830-015 | 97.50% | 0.6008<br>*0.7683 | No<br>No | 0.9897 | No | 0.9896 | No | 0.9715 | No | 0.9966 | No | 0.9926 | No |
| GC-SD318-0.0-0.5 | 19830-016 | 86.25% | 0.0141 | Yes | 0.5662 | No | 0.5569 | No | 0.4392 | No | 0.5984 | No | 0.5759 | No |
| GC-SD310-0.0-0.5 | 19830-017 | 83.75% | <0.0001 | Yes | 0.3249 | No | 0.3284 | No | 0.1690 | No | 0.3314 | No | 0.3246 | No |

Note: In cases where a statistical outlier was detected statistical comparisons were made with and without the outlier. Instances where the p Value was calculated without the outlier are identified by "*".

**Table 7. *N. virens* Day 28 Wet Weight Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

Day 28 Wet Weight (grams/organism) Summary

| Sample ID | ESI Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19825-000 | 8 | 2.908 | 2.289 | 3.615 | 13.43% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 3.291 | 2.753 | 4.094 | 14.95% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 3.052 | 2.276 | 4.534 | 21.96% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 3.056 | 2.431 | 3.687 | 15.06% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 3.259 | 2.757 | 3.683 | 10.11% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 2.647 | 1.974 | 3.112 | 13.34% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 3.102 | 1.970 | 4.356 | 23.68% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 3.439 | 2.760 | 4.408 | 15.52% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 3.092 | 2.494 | 3.993 | 17.15% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 3.066 | 1.970 | 3.586 | 18.14% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | 2.997 | 2.439 | 3.434 | 10.04% |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | 2.532 | 2.030 | 2.860 | 10.07% |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 2.999 | 2.006 | 3.687 | 19.83% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 3.234 | 2.443 | 4.186 | 15.87% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 2.891 | 2.174 | 3.514 | 15.74% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 2.836 | 2.096 | 3.205 | 12.97% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 2.936 | 2.419 | 3.240 | 8.83% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 3.184 | 2.574 | 4.244 | 18.68% |

**Table 7. *N. virens* Day 28 Wet Weight Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

Day 28 Wet Weight Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | ESI Code | Mean | Lab Control 19830-000 p Value | | GC-SD326 19830-003 p Value | | GC-SD328 19830-008 p Value | | GC-SD330 19830-009 p Value | | GC-SD333 19830-010 p Value | | GC-SD329 19830-012 p Value | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Control | 19825-000 | 2.908 | - | - | - | - | - | - | - | - | - | - | - | - |
| GC-SD326-0.0-0.5 | 19830-003 | 3.291 | 0.9470 | No | - | - | - | - | - | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | 3.052 | 0.6961<br>*0.3616 | No<br>No | 0.2141<br>*0.0299 | No<br>Yes | - | - | - | - | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | 3.056 | 0.7517 | No | 0.1705 | No | 0.5068<br>*0.8409 | No<br>No | - | - | - | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | 3.259 | 0.9640 | No | 0.4398 | No | 0.7775<br>*0.9861 | No<br>No | 0.8357 | No | - | - | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | 2.647 | 0.0915 | No | 0.0047 | Yes | 0.0765<br>*0.1465 | No<br>No | 0.0328 | Yes | 0.0015 | Yes | - | - |
| GC-SD303-0.0-0.5 | 19830-001 | 3.102 | 0.7403 | No | 0.2772 | No | 0.5560 | No | 0.5579 | No | 0.2949 | No | 0.9317 | No |
| GC-SD307A-0.0-0.5 | 19830-002 | 3.439 | 0.9803 | No | 0.7126 | No | 0.8891 | No | 0.9264 | No | 0.7843 | No | 0.9982 | No |
| GC-SD309-0.0-0.5 | 19830-004 | 3.092 | 0.7797 | No | 0.2247 | No | 0.5528 | No | 0.5564 | No | 0.2313 | No | 0.9660 | No |
| GC-SD313-0.0-0.5 | 19830-005 | 3.066 | 0.7397 | No | 0.2025 | No | 0.5183 | No | 0.5144 | No | 0.2061 | No | 0.9532 | No |
| GC-SD314-0.0-0.5 | 19830-006 | 2.997 | 0.6916 | No | 0.0853 | No | 0.4180<br>*0.8256 | No<br>No | 0.3816 | No | 0.0593 | No | 0.9745 | No |
| GC-SD315-0.0-0.5 | 19830-007 | 2.532 | 0.0194 | Yes | 0.0008 | Yes | 0.0297<br>*0.0300 | Yes<br>Yes | 0.0068 | Yes | 0.0001 | Yes | 0.2335 | No |
| GC-SD307B-0.0-0.5 | 19830-011 | 2.999 | 0.6395 | No | 0.1512 | No | 0.4356 | No | 0.4163 | No | 0.1490 | No | 0.9143 | No |
| GC-SD324-0.0-0.5 | 19830-013 | 3.234 | 0.9128 | No | 0.4112 | No | 0.7245 | No | 0.7605 | No | 0.4543 | No | 0.9908 | No |
| GC-SD321-0.0-0.5 | 19830-014 | 2.891 | 0.4700 | No | 0.0567 | No | 0.2923<br>*0.5963 | No<br>No | 0.2411 | No | 0.0427 | Yes | 0.8751 | No |
| GC-SD319-0.0-0.5 | 19830-015 | 2.836 | 0.3569 | No | 0.0275 | Yes | 0.2198<br>*0.4929 | No<br>No | 0.1545 | No | 0.0149 | Yes | 0.8447 | No |
| GC-SD318-0.0-0.5 | 19830-016 | 2.936 | 0.5672 | No | 0.0462 | Yes | 0.3282<br>*0.7331 | No<br>No | 0.2648 | No | 0.0235 | Yes | 0.9586 | No |
| GC-SD310-0.0-0.5 | 19830-017 | 3.184 | 0.8548 | No | 0.3500 | No | 0.6589 | No | 0.6805 | No | 0.3797 | No | 0.9773 | No |

Note: In cases where a statistical outlier was detected statistical comparisons were made with and without the outlier. Instances where the p Value was calculated without the outlier are identified by "*".

**Table 8.** ***N. virens*** **Day 28 Biomass Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

Day 28 Biomass (grams/organism) Summary

| Sample ID | ESI Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19825-000 | 8 | 2.837 | 2.289 | 3.615 | 14.95% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 2.772 | 2.005 | 3.275 | 14.41% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 2.582 | 1.836 | 3.627 | 22.91% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 2.689 | 1.945 | 3.666 | 23.23% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 2.756 | 2.381 | 3.143 | 10.50% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 2.251 | 1.745 | 2.801 | 19.10% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 2.668 | 1.773 | 3.115 | 16.76% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 3.212 | 2.747 | 4.408 | 16.80% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 2.646 | 1.247 | 3.594 | 27.84% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 1.879 | 1.182 | 2.869 | 38.70% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | 2.235 | 1.707 | 2.789 | 17.30% |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | 1.787 | 1.327 | 2.246 | 20.95% |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 2.575 | 2.006 | 3.271 | 16.78% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 2.815 | 1.984 | 3.349 | 15.78% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 2.660 | 2.174 | 3.514 | 15.69% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 2.762 | 2.096 | 3.205 | 14.24% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 2.534 | 1.935 | 3.175 | 14.27% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 2.668 | 2.134 | 3.395 | 19.96% |

**Table 8. *N. virens* Day 28 Biomass Summary. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| Day 28 Biomass Analysis | | | Statistically Significant Difference, "<" as Compared to: | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Control 19830-000 | | GC-SD326 19830-003 | | GC-SD328 19830-008 | | GC-SD330 19830-009 | | GC-SD333 19830-010 | | GC-SD329 19830-012 | |
| Sample ID | ESI Code | Mean | p Value | | p Value | | p Value | | p Value | | p Value | | p Value | |
| Laboratory Control | 19825-000 | 2.837 | - | - | - | - | - | - | - | - | - | - | - | - |
| GC-SD326-0.0-0.5 | 19830-003 | 2.772 | 0.3794 | No | - | - | - | - | - | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | 2.582 | 0.1696 | No | 0.2318 | No | - | - | - | - | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | 2.689 | 0.2943 | No | 0.3777 | No | 0.6346 | No | - | - | - | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | 2.756 | 0.3327 | No | 0.4647 | No | 0.7669 | No | 0.6073 | No | - | - | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | 2.251 | 0.0079 | Yes | 0.0124 | Yes | 0.1105 | No | 0.0623 | No | 0.0077 | Yes | - | - |
| GC-SD303-0.0-0.5 | 19830-001 | 2.668 | 0.2263 | No | 0.3159 | No | 0.6265 | No | 0.4704 | No | 0.3236 | No | 0.9611 | No |
| GC-SD307A-0.0-0.5 | 19830-002 | 3.212 | 0.9281 | No | 0.9576<br>*0.9240 | No<br>No | 0.9786 | No | 0.9528 | No | 0.9731<br>*0.9663 | No<br>No | 0.9993 | No |
| GC-SD309-0.0-0.5 | 19830-004 | 2.646 | 0.2684 | No | 0.3387 | No | 0.5749 | No | 0.4514 | No | 0.3500<br>*0.6618 | No<br>No | 0.8946 | No |
| GC-SD313-0.0-0.5 | 19830-005 | 1.879 | 0.0031 | Yes | 0.0044 | Yes | 0.0262 | Yes | 0.0415 | Yes | 0.0034 | Yes | 0.1171 | No |
| GC-SD314-0.0-0.5 | 19830-006 | 2.235 | 0.0051 | Yes | 0.0081 | Yes | 0.0931 | No | 0.0511 | No | 0.0043 | Yes | 0.4689 | No |
| GC-SD315-0.0-0.5 | 19830-007 | 1.787 | 0.0001 | Yes | 0.0001 | Yes | 0.0031 | Yes | 0.0018 | Yes | <0.0001 | Yes | 0.0185 | Yes |
| GC-SD307B-0.0-0.5 | 19830-011 | 2.575 | 0.1207 | No | 0.1794 | No | 0.4890 | No | 0.3388 | No | 0.1700 | No | 0.9224 | No |
| GC-SD324-0.0-0.5 | 19830-013 | 2.815 | 0.4604 | No | 0.5783 | No | 0.8056 | No | 0.6752 | No | 0.6197 | No | 0.9891 | No |
| GC-SD321-0.0-0.5 | 19830-014 | 2.660 | 0.2076 | No | 0.2957 | No | 0.6174 | No | 0.4575 | No | 0.2999 | No | 0.9630 | No |
| GC-SD319-0.0-0.5 | 19830-015 | 2.762 | 0.3601 | No | 0.4797 | No | 0.7572 | No | 0.6082 | No | 0.5125 | No | 0.9868 | No |
| GC-SD318-0.0-0.5 | 19830-016 | 2.534 | 0.0736 | No | 0.1160 | No | 0.4240 | No | 0.2771 | No | 0.0981 | No | 0.9121 | No |
| GC-SD310-0.0-0.5 | 19830-017 | 2.668 | 0.2482 | No | 0.3332 | No | 0.6184 | No | 0.4726 | No | 0.3440 | No | 0.9468 | No |

Note: In cases where a statistical outlier was detected statistical comparisons were made with and without the outlier. Instances where the p Value was calculated without the outlier are identified by "*".

**Table 9. Summary of Water Qualities. Gowanus Canal Superfund Site, Brooklyn, New York. July 2010.**

| | Temp | DO Conc | pH | SpCond | Salinity |
|---|---|---|---|---|---|
| | C | mg/L | SU | uS/cm | ppt |
| Minimum: | 11.34 | 3.05 | 7.06 | 40372 | 25.79 |
| Mean: | 12.71 | 7.76 | - | 47845 | 31.12 |
| Maximum: | 15.46 | 9.77 | 8.33 | 49668 | 32.43 |

**APPENDIX A**
**RAW DATA AND STATISTICAL SUPPORT**


| Contents | Number of Pages |
|---|---|
| *N. virens* Daily Observation Record | 10 |
| *N. virens* Daily Water Quality Measurements | 79 |
| CETIS Worksheet | 3 |
| *N. virens* Recovery Bench Sheets | 4 |
| *N. virens* Mean Wet Weight at Start of Assay | 1 |
| *N. virens* Organism History | 1 |
| *N. virens* Survival Statistical Analysis | 93 |
| *N. virens* Mean Wet Weight Statistical Analysis | 97 |
| *N. virens* Mean Biomass Statistical Analysis | 90 |
| 28 Day Temperature Profile | 1 |
| Chain of Custody and Sample Receipt Condition Documentation | 32 |
| E-mail Communications: Reference Site Identification | 1 |
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## *Nereis virens* 28 Day Study # 19830

**HDR Engineering, Inc. - Gowanus Canal Superfund Site**

| Day | Date | Water Qualities and Flow | Initial | Day | Date | Water Qualities and Flow | Initial |
|---|---|---|---|---|---|---|---|
| 0 | 7/8/10 | ✓/✓ | AM | 15 | 7/23/10 | ✓/✓ | AM/JTP |
| 1 | 7/9/10 | ✓/✓ | AM | 16 | 7/24/10 | ✓/✓ | JTP |
| 2 | 7/10/10 | ✓/✓ | KE | 17 | 7/25/10 | ✓/✓ | JTP |
| 3 | 7-11 | ✓/✓ | DM | 18 * | 7/26/10 | ✓/✓ | JTP/AM |
| 4 | 7/12/10 | ✓/✓ | JTP/AM | 19 | 7/27/10 | ✓/✓ | AM |
| 5 | 7/13/10 | ✓/✓ | AM/JTP | 20 | 7/28/10 | ✓/✓ | AM/JTP |
| 6 | 7/14/10 | ✓/✓ | AM | 21 | 7/29/10 | ✓/✓ | AM/JTP |
| 7 | 7/15/10 | ✓/✓ | JTP/AM | 22 | 7/30/10 | ✓/✓ | AM/AM |
| 8 | 7/16/10 | ✓/✓ | JTP/JEB | 23 | 7-31-10 | ✓/✓ | DM |
| 9 | 7/17/10 | ✓/✓ | JTP | 24 | 8/1/10 | ✓/✓ | AM |
| 10 | 7/18/10 | ✓/✓ | AM | 25 | 8/2/10 | ✓/✓ | AM |
| 11 | 7/19/10 | ✓/✓ | JTP/AM | 26 | 8/3/10 | ✓/✓ | AM/JTP |
| 12 | 7/20/10 | ✓/✓ | AM | 27 | 8/4/10 | ✓/✓ | AM/JL |
| 13 | 7/21/10 | ✓/✓ | JTP/JEB | 28 | 8/5/10 | ✓/✓ | AM/JL |
| 14 | 7/22/10 | ✓/✓ | JTP/AM | | | | |

Notes: Refresh Twice Daily, ≈ 30 minutes each time.

* DO Low in position 13b, added more air lines as corrective action 7/26 JTP

Fed on 7/15/10 AM/JTP (3-5g Clams)

Fed on 7/22/10 AM/JTP (3-5g Green Algae)

Fed on 7/29/10 AM/JTP (3-5g Green Algae)

On day 21 7/29/10 positions #16, 17, 53, + 62 were not feed due to left over algae from last feeding AM 7/30/10

## Test Notes

| Study#: | Client: | Species: |
|---|---|---|
| 19875<br>~~19830~~ | HDR Engineering, Inc. | Nereis virens<br>~~*Leptocheirus plumulosus*~~ |

DO was low for position #'s 6, 23, 65, 85, 86, & 113.
More air lines were added. 7/9 JTP
Temps were low in test vessels across from
climate control units. Room temp was adjusted.
Pos # 47 experienced low DO on 7/14/10 AM
Pos # 48 experienced low DO on 7/15/10 AM
Pos # 20 experienced low DO on 7/18/10. When
DO has been low, more air lines have been
added. This was the corrective action taken 7/18

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 19830-002 | 1 | 1 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 1 | 2 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-015 | 1 | 3 | N | N | N | N | N | 1S | N | N | N | N | N | N | N | N |
| 19830-017 | 1 | 4 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 1 | 5 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 1 | 6 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-014 | 1 | 7 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 1 | 8 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 1 | 9 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 1 | 10 | N | N | N | N | 1S | N | N | N | N | N | N | N | N | N |
| 19830-008 | 1 | 11 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 1 | 12 | 7S | 7S | 5S | 4S | 4S | 1S | 2S | 3S | 3S | 1S | 1S | 1S | N | 1S |
| 19830-004 | 1 | 13 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-013 | 1 | 14 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 1 | 15 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-005 | 1 | 16 | N | N | 1S | 2S | N | N | 2S | 2D 4S | 3S 1D | N | N | N | N | N |
| 19830-007 | 1 | 17 | 8S | 7S | 7S | 4S | 6S | 3S | 5S | 3D 4S | 3S | 3S | 4S | 4S | 1S | 1S |
| 19830-003 | 1 | 18 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 2 | 19 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 2 | 20 | N | N | N | N | N | N | N | N | 1S | N | N | N | N | N |
| 19830-007 | 2 | 21 | 7S | 7S | 8S | 8S | 8S | 6S | 4S | 5S | 6S | 1D 1S | 3S | 6S | 2S | 1S |
| 19830-015 | 2 | 22 | N | N | 1S | N | 1S | N | N | N | 1S | 1S | 1S | 1S | N | N |
| 19830-008 | 2 | 23 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 2 | 24 | N | N | N | N | N | N | N | N | N | N | 1S | N | N | N |
| 19830-012 | 2 | 25 | N | N | N | N | N | N | N | N | 1S | N | N | 1S | N | N |
| 19830-004 | 2 | 26 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 2 | 27 | N | N | N | N | N | N | N | N | 1S | N | N | 1S | N | N |
| 19830-003 | 2 | 28 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-011 | 2 | 29 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 2 | 30 | N | N | 1S | N | N | N | N | N | N | N | N | N | N | N |
| 19830-014 | 2 | 31 | N | N | N | N | N | N | N | N | N | N | N | N | N | 1S |
| 19830-001 | 2 | 32 | N | N | N | N | N | N | N | N | N | N | N | 2S | N | N |
| 19830-013 | 2 | 33 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-010 | 2 | 34 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 2 | 35 | 6S | 6S | 8S | 1D 6S | 1D 2S | 2S | 1S | 1D | 1S | 1S | 1S | N | N | N |
| 19830-005 | 2 | 36 | 5S | 6S | 2S | 2S | 2S | 2S | 2S | 1S | 1S | 1S | 2S | 1S | 1S | N |
| | | **Initials** | AM 7/9 | KL 7/10 | DM 7/11 | JTP 7/12 | AM 7/13 | AM 7/14 | JTP 7/15 | JTP 7/16 | JTP 7/17 | AM 7/18 | JTP 7/19 | JTP 7/20 | JTB 7/21 | JTP 7/22 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 19830-013 | 3 | 37 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 3 | 38 | N | N | N | N | 1S | N | N | N | 1S | N | N | 1S | N | N |
| 19830-017 | 3 | 39 | N | N | N | 2S | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 3 | 40 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-000 | 3 | 41 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 3 | 42 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 3 | 43 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-014 | 3 | 44 | N | N | N | 1S | N | N | N | N | 1S | N | N | N | N | N |
| 19830-004 | 3 | 45 | N | N | N | N | N | N | N | N | N | N | N | 2S | N | N |
| 19830-006 | 3 | 46 | 6S | 6S | 6S | 4S | 4S | 4S | (10)3S | 2S | 2S | 2S | 4S | 2S | 2S | N |
| 19830-005 | 3 | 47 | 6S | 6S | 4S | 5S | 4S | 3S | 3S | 2S | 1S | 1S | 1S | 1S | 1S | N |
| 19830-011 | 3 | 48 | N | N | N | N | N | N | N | N | 1S | N | N | N | N | N |
| 19830-002 | 3 | 49 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 3 | 50 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 3 | 51 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-003 | 3 | 52 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-007 | 3 | 53 | 10S | 10S | 8S | 6S | 10S | 10S | 10S | 10S | 9S | 8S | 7S | 8S | 2S | 3S |
| 19830-015 | 3 | 54 | N | N | 1S | 1S | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 4 | 55 | 8S | 8S | 7S | 2S | 3S | 2S | 3S | (10)3S | (2D) | N | N | 1S | N | N |
| 19830-011 | 4 | 56 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 4 | 57 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 4 | 58 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-015 | 4 | 59 | 1S | N | 1S | N | 1S | 1S | N | N | N | N | N | N | N | N |
| 19830-009 | 4 | 60 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 4 | 61 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-016 | 4 | 62 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 4 | 63 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 4 | 64 | N | N | N | N | 1S | N | 1S | N | N | N | N | N | N | N |
| 19830-007 | 4 | 65 | 7S | 5S | 8S | 10S | 7S | 8S | 6S | 4S | 3S | 4S | 4S | 4S | 6S | 3S |
| 19830-014 | 4 | 66 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 4 | 67 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 4 | 68 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-013 | 4 | 69 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 4 | 70 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-005 | 4 | 71 | 8S | 8S | 6S | 5S | 4S | 2S | 1S | 2S | 3S | 1S | N | N | N | N |
| 19830-003 | 4 | 72 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| | | **Initials** | AM 7/9 | VL 7/10 | OM 7/11 | JTP 7/12 | AM 7/13 | AM 7/14 | JTP 7/15 | JTP 7/16 | JTP 7/17 | AM 7/18 | JTP 7/19 | JTP 7/20 | JEB 7/21 | JTP 7/22 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 19830-016 | 5 | 73 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 5 | 74 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 5 | 75 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-013 | 5 | 76 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 5 | 77 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 5 | 78 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 5 | 79 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 5 | 80 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-005 | 5 | 81 | 7S | 7S | 6S | 5S | 5S | 4S | 3S | N | N | 4S | (ND) 1S | 1S | N | N |
| 19830-011 | 5 | 82 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 5 | 83 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 5 | 84 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 5 | 85 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 5 | 86 | 9S | 9S | 9S | 8S | 7S | 4S | 4S | 1S | 1S | 2S | 3S | 2S | 1S | 1S |
| 19830-008 | 5 | 87 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-007 | 5 | 88 | 10S | 9S | 7S | 8S | 7S | 8S | 4S | 3S | (ND) 4S | 4S | 4S | 3S | 3S | 3S |
| 19830-014 | 5 | 89 | N | N | N | N | N | N | N | N | N | N | N | 2S | N | N |
| 19830-015 | 5 | 90 | 2S | 2S | 1S | 1S | 1S | 1S | N | N | N | N | N | N | N | N |
| 19830-005 | 6 | 91 | 5S | 6S | 4S | 3S | 3S | 2S | 2S | 2S | (ND) 1S | 2S | N | N | N | N |
| 19830-007 | 6 | 92 | 10S | 9S | 10S | 9S | 10S | 10S | 10S | 9S | 7S | (10) 5S Sm | 3S | 5S | 6S | 4S |
| 19830-002 | 6 | 93 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 6 | 94 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-013 | 6 | 95 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 6 | 96 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 6 | 97 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-015 | 6 | 98 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-014 | 6 | 99 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 6 | 100 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 6 | 101 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 6 | 102 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 6 | 103 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-001 | 6 | 104 | N | N | N | N | N | N | N | N | N | 1S | N | N | N | N |
| 19830-017 | 6 | 105 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 6 | 106 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 6 | 107 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 6 | 108 | 8S | 8S | 8S | 7S | 8S | 4S | 3S | 3S | 3S | 3S | 2S | 2S | N | N |
| **Initials** | | | AM 7/10 | MC 7/10 | CM 7/11 | JTP 7/12 | AM 7/13 | AM 7/14 | JTP 7/15 | JTP 7/16 | JTP 7/17 | AM 7/18 | JTP 7/19 | JTP 7/20 | JTP 7/21 | JTP 7/22 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 19830-015 | 7 | 109 | N | N | N | 1S | N | N | N | N | 1S | N | N | N | N | N |
| 19830-017 | 7 | 110 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 7 | 111 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 7 | 112 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 7 | 113 | 7S | 7S | 8S | 4S | 4S | 3S | 3S | 2S | 1S | N | N | N | N | N |
| 19830-012 | 7 | 114 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 7 | 115 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 7 | 116 | N | N | N | N | N | N | N | N | 1S | N | N | N | N | N |
| 19830-014 | 7 | 117 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-005 | 7 | 118 | 9S | 9S | 7S | 3S | 3S | 3S (10) | (1D) 1S | 2S | 2S | 1S | 1S | 1S | 1S | 1S |
| 19830-001 | 7 | 119 | N | N | N | N | N | N | N | 1S | 1S | N | N | 1S | 1S | N |
| 19830-000 | 7 | 120 | N | N | N | N | N | N | 1S | 1S | 4S | 1S | 3S | N | 1S | 2S |
| 19830-009 | 7 | 121 | N | N | N | N | N | N | N | N | 3S | 1S | N | N | N | N |
| 19830-010 | 7 | 122 | N | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-007 | 7 | 123 | N | N | 7S | 7S | 7S | 4S | 5S | 5S | (2D) 4S | 5S (10) | 3S | 2S | N | N |
| 19830-002 | 7 | 124 | N | N | N | N | N | N | N | 1S | N | N | N | N | N | 2S |
| 19830-013 | 7 | 125 | N | N | N | N | N | N | 1S | N | N | N | N | 1S | N | N |
| 19830-016 | 7 | 126 | N | N | N | N | N | N | N | N | N | N | 1S | N | N | N |
| 19830-017 | 8 | 127 | N | N | 1S | N | N | N | N | N | 1S | N | N | 2S | N | 1S |
| 19830-013 | 8 | 128 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 8 | 129 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-007 | 8 | 130 | 10S | 10S | 8S | 6S | 2S | 3S | 2S | 2S | 3S | 2S | 1S | (1D) 1S | N | N |
| 19830-011 | 8 | 131 | ~~10S~~ N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 8 | 132 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 8 | 133 | N | N | N | N | N | N | N | N | 2S | N | N | 1S | N | N |
| 19830-003 | 8 | 134 | N | N | N | N | N | N | N | 1S | 3S | N | N | 3S | 1S | N |
| 19830-005 | 8 | 135 | 10S | 9S | 10S | 9S | 7S | 4S | 2S | 5S | (1D) 3S | 4S | 1S | 2S | N | 1S |
| 19830-012 | 8 | 136 | N | N | N | N | N | N | 1S | N | 2S | 1S | N | N | N | N |
| 19830-006 | 8 | 137 | 7S | 7S | 5S | 4S | 4S | 4S | 3S | 2S | 3S | 2S | N | N | 1S | 1S |
| 19830-001 | 8 | 138 | N | N | N | N | N | N | N | 1S | N | N | N | N | N | N |
| 19830-014 | 8 | 139 | N | N | N | N | N | N | N | 1S | 2S | N | N | N | N | N |
| 19830-000 | 8 | 140 | N | N | N | N | N | N | N | 1S | 4S | N | N | N | 1S | 1S |
| 19830-009 | 8 | 141 | N | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 8 | 142 | N | N | N | N | N | N | N | N | 2S | N | N | N | 1S | N |
| 19830-015 | 8 | 143 | N | N | N | N | N | N | N | N | N | N | N | N | N | 1S |
| 19830-016 | 8 | 144 | N | N | N | N | N | N | N | N | 1S | N | N | 1S | N | N |
| **Initials** | | | AM 7/9/10 | VC 7/10 | DM 7/11 | JTP 7/13 | AM 7/13 | AM 7/14 | JTP 7/15 | JTP 7/16 | JTP 7/17 | AM 7/19 | JTP 7/19 | JTP 7/20 | JEB 7/21 | JTP 7/22 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 19830-002 | 1 | 1 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 1 | 2 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-015 | 1 | 3 | N | N | N | N | N | N | N | N | N | S | N | N | N |
| 19830-017 | 1 | 4 | N | N | N | S | S | N | N | N | N | N | N | N | N |
| 19830-001 | 1 | 5 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 1 | 6 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-014 | 1 | 7 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 1 | 8 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 1 | 9 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 1 | 10 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 1 | 11 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 1 | 12 | S | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 1 | 13 | N | N | N | S | N | N | N | N | N | N | N | N | N |
| 19830-013 | 1 | 14 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 1 | 15 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-005 | 1 | 16 | N | N | N | N | N | N | N | N | N | N | S | N | N |
| 19830-007 | 1 | 17 | 5S | 4S | 1S | 2S | 1S | 2S | N | 1S | N | 1S | (1D) | N | 2S |
| 19830-003 | 1 | 18 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 2 | 19 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 2 | 20 | N | N | N | N | N | N | S | N | N | N | N | N | N |
| 19830-007 | 2 | 21 | 3S | (1D) 2S | 3S | 2S | 3S | 1S | N | N | N | N | N | 3S | 1S |
| 19830-015 | 2 | 22 | 1S | 2S | N | N | N | N | N | 1S | N | N | N | N | N |
| 19830-008 | 2 | 23 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 2 | 24 | N | N | N | N | N | N | N | N | N | N | N | N | 1S |
| 19830-012 | 2 | 25 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 2 | 26 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 2 | 27 | N | 2S | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 2 | 28 | N | N | N | N | N | N | N | N | N | 1S | N | N | N |
| 19830-011 | 2 | 29 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 2 | 30 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-014 | 2 | 31 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 2 | 32 | N | N | N | N | N | N | N | N | N | 1S | N | N | N |
| 19830-013 | 2 | 33 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 2 | 34 | N | N | N | N | N | N | N | N | N | N | N | 1S | N |
| 19830-006 | 2 | 35 | 1S | N | N | N | N | N | 2S | N | N | N | N | N | N |
| 19830-005 | 2 | 36 | 2S | 1S | 2S | N | N | N | N | 1S | N | N | N | N | N |
| | | **Initials** | JTP 7/23 | JTP 7/24 | DM 7-25 | JTP 7/26 | AM 7/27 | JTP 7/28 | [illegible] | AM 7/30 | DM 7-31 | AM 8/1/16 | JTP 8/2/16 | JTP 8/3/16 | JTP 8/4/16 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

NBF
7/29

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 19830-013 | 3 | 37 | 2S | N | N | N | N | N | N | N | N | N | 2S | N | N |
| 19830-009 | 3 | 38 | 1S | N | N | 1S | 2S | N | N | N | N | N | N | N | 1S |
| 19830-017 | 3 | 39 | N | 1S | N | N | N | N | N | N | N | N | N | N | 2S |
| 19830-016 | 3 | 40 | N | N | N | N | N | N | N | N | 2S | 1S | N | N | 2S |
| 19830-000 | 3 | 41 | 2S | 1S | N | 1S | N | 3S | N | N | N | N | 2S | 2S | 2S |
| 19830-010 | 3 | 42 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 3 | 43 | N | N | N | N | N | N | 1S | 1S | N | N | N | N | 1S |
| 19830-014 | 3 | 44 | N | N | N | N | N | N | N | 1S | N | 1S | 1S | 2S | 1S |
| 19830-004 | 3 | 45 | 3S | N | N | N | N | N | N | N | N | N | N | N | 1S |
| 19830-006 | 3 | 46 | 2S | N | N | N | N | N | 1S | N | N | N | N | N | N |
| 19830-005 | 3 | 47 | 1S | 1S | N | N | N | N | N | N | N | 1S | N | 1S | 1S |
| 19830-011 | 3 | 48 | N | N | N | N | N | N | N | N | N | 2S | N | N | 1S |
| 19830-002 | 3 | 49 | 1S | N | N | N | 1S | N | N | N | N | N | N | N | N |
| 19830-012 | 3 | 50 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 3 | 51 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 3 | 52 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-007 | 3 | 53 | 2S | 3S | N | 1S | N | 2S | N | (1D) | 1S | 2S | N | N | N |
| 19830-015 | 3 | 54 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 4 | 55 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 4 | 56 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 4 | 57 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 4 | 58 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-015 | 4 | 59 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 4 | 60 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 4 | 61 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 4 | 62 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 4 | 63 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 4 | 64 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-007 | 4 | 65 | 4S | 4S | 5S | 2S | 2S | (1D) 2S | 2S | 2S | 4S | N | 1S | 4S | (1D) 1S |
| 19830-014 | 4 | 66 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 4 | 67 | N | N | N | N | N | N | N | N | N | N | 1S | N | N |
| 19830-017 | 4 | 68 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-013 | 4 | 69 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 4 | 70 | N | N | N | N | N | N | N | N | N | N | N | N | 1S |
| 19830-005 | 4 | 71 | N | N | N | 2S | 1S | 1S | N | N | N | N | N | N | N |
| 19830-003 | 4 | 72 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| | | **Initials** | JTP 7/23 | JTP 7/24 | DM 7/25 | JTP 7/26 | AM 7/27 | JTP 7/28 | NBF 7/29 | AM 7/30 | DM 7/31 | AM 8/1/10 | JTP 8/2/10 | JTP 8/3/10 | JT 8/4/10 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 19830-016 | 5 | 73 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 5 | 74 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-000 | 5 | 75 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-013 | 5 | 76 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 5 | 77 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-002 | 5 | 78 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 5 | 79 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 5 | 80 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-005 | 5 | 81 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 5 | 82 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 5 | 83 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 5 | 84 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-009 | 5 | 85 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 5 | 86 | N | N | N | 15 | N | N | 15 | N | N | N | N | N | N |
| 19830-008 | 5 | 87 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-007 | 5 | 88 | N | 45 | 35 | N | 15 | 15 | N | N | N | 25 | 15 | 15 | N |
| 19830-014 | 5 | 89 | N | N | N | N | N | N | N | 15 | N | N | N | N | N |
| 19830-015 | 5 | 90 | N | N | N | N | N | N | 15 | N | N | N | N | N | N |
| 19830-005 | 6 | 91 | N | 15 | N | N | N | N | N | N | N | 15 | N | N | N |
| 19830-007 | 6 | 92 | 25 | 25 | N | N | N | 15 | N | N | 35 | N | 25 | N | 45 |
| 19830-002 | 6 | 93 | N | N | N | N | N | 15 | N | N | N | N | N | N | 15 |
| 19830-009 | 6 | 94 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-013 | 6 | 95 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 6 | 96 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 6 | 97 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-015 | 6 | 98 | N | N | N | 15 | N | N | N | N | N | N | N | N | N |
| 19830-014 | 6 | 99 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 6 | 100 | N | N | 15 | N | N | N | N | N | N | N | N | N | N |
| 19830-010 | 6 | 101 | N | N | N | 25 | N | N | 15 | N | N | N | N 15 | N | N |
| 19830-000 | 6 | 102 | N | 15 | N | N | N | N | N | N | N | N | N | N | N |
| 19830-016 | 6 | 103 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 6 | 104 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 6 | 105 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 6 | 106 | N | N | N | N | N | N | N | N | N | 15 | N | N | N |
| 19830-011 | 6 | 107 | N | N | N | N | N | 15 | N | N | N | N | N | N | N |
| 19830-006 | 6 | 108 | N | N | N | N | N | 15 | N | N | N | N | N | N | N |
| | | **Initials** | AM 7/23 | JTP 7/24 | AM 7/25 | JTP 7/26 | AM 7/27 | JTP 7/28 | NRC 7/29 | AM 7/30 | DM 7/31 | AM 8/1/10 | JTP 8/2/10 | JTP 8/3/10 | JTP 8/4/10 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

# Daily Observations for *Nereis virens* Study # 19830

Gowanus Canal Superfund Site

| | | | DAY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample** | Rep | Pos | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 19830-015 | 7 | 109 | 1S | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-017 | 7 | 110 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-003 | 7 | 111 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-008 | 7 | 112 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-006 | 7 | 113 | 2S | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-012 | 7 | 114 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-004 | 7 | 115 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-011 | 7 | 116 | N | N | N | N | N | N | N | N | N | N | N | 2S | 2S |
| 19830-014 | 7 | 117 | N | N | N | N | N | N | N | N | N | N | N | N | 1S |
| 19830-005 | 7 | 118 | 2S | 1S | N | N | N | N | N | N | N | N | N | N | N |
| 19830-001 | 7 | 119 | N | N | N | 2S | N | 1S | N | N | N | N | N | 1S | N |
| 19830-000 | 7 | 120 | 1S | 2S | N | 1S | N | 1S | N | N | N | N | N | N | 6S |
| 19830-009 | 7 | 121 | 3S | N | N | 1S | N | 2S | N | N | N | N | N | N | N |
| 19830-010 | 7 | 122 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| 19830-007 | 7 | 123 | 3S | 2S | 1S | N | N | 2S | N | N | N | N | 1S | 1S | N |
| 19830-002 | 7 | 124 | 1S | 1S | N | N | N | 1S | N | N | 1S | 1S | 1S | N | N |
| 19830-013 | 7 | 125 | 1S | N | N | N | N | N | N | N | 3S | N | N | N | N |
| 19830-016 | 7 | 126 | 5S | 1S | N | 1S | 1S | 1S | N | N | N | N | N | 2S | N |
| 19830-017 | 8 | 127 | 5S | N | N | 2S | 1S | N | N | N | N | N | N | N | N |
| 19830-013 | 8 | 128 | N | N | N | 2S | 1S | N | N | N | N | N | N | 2S | N |
| 19830-010 | 8 | 129 | N | N | N | N | N | 2S | N | N | N | 1S | N | N | N |
| 19830-007 | 8 | 130 | 1S | 2S | N | N | N | N | N | N | 2S | N | N | N | N |
| 19830-011 | 8 | 131 | N | N | N | N | N | 2S | N | N | N | N | N | 2S | 1S |
| 19830-002 | 8 | 132 | 1S | 1S | N | N | N | N | N | N | N | 1S | N | 2S | 1S |
| 19830-004 | 8 | 133 | N | N | N | N | N | 2S | N | N | N | N | N | N | 1S |
| 19830-003 | 8 | 134 | N | N | N | N | N | 1S | N | N | N | N | N | 1S | 1S |
| 19830-005 | 8 | 135 | N | 1S | N | 1S | N | 2S | 1S | N | 2S | N | N | 2S | N |
| 19830-012 | 8 | 136 | N | N | N | 1S | 2S | 1S | N | N | N | 1S | N | 1S | 3S |
| 19830-006 | 8 | 137 | N | N | N | N | 1S | N | N | N | N | N | N | N | 1S |
| 19830-001 | 8 | 138 | N | N | N | N | N | 1S | N | N | N | N | N | N | 1S |
| 19830-014 | 8 | 139 | 1S | 2S | N | N | N | N | N | N | N | N | N | 1S | 1S |
| 19830-000 | 8 | 140 | N | 2S | N | 2S | N | N | N | N | N | N | N | N | 1S |
| 19830-009 | 8 | 141 | N | 1S | N | 1S | N | N | N | N | N | N | N | N | 1S |
| 19830-008 | 8 | 142 | N | N | N | N | N | N | N | N | 2S | N | 1S | N | 3S |
| 19830-015 | 8 | 143 | 1S | N | N | 1S | 1S | N | N | N | N | N | N | N | 2S |
| 19830-016 | 8 | 144 | N | N | N | N | N | N | N | N | N | N | N | N | N |
| | | **Initials** | AM 7/23/10 | JTP 7/24 | DAM 7.25 | JTP 7/26 | AM 7/27 | JTP 7/28 | MBF 7/29 | AM 7/30 | DAM 7.31 | AM 8/1/10 | JTP 8/2/10 | JTP 8/3/10 | JZ 8/4/10 |

Enter **R** for ones replaced during the first 24 hours, **S** for animals observed on the surface, **D** for dead animals.

**STUDY: 19875**
**CLIENT: HDR Engineering, Inc.**
**PROJECT: Gowanus Canal Superfund Site**
**ASSAY: 28 Day Nereis virens**
**TASK: Daily Overlying Water Qualities**

| | Temp | DO Conc | pH | SpCond | Salinity |
|---|---|---|---|---|---|
| Minimum: | 11.34 | 3.05 | 7.06 | 40372 | 25.79 |
| Mean: | 12.71 | 7.76 | | 47845 | 31.12 |
| Maximum: | 15.46 | 9.77 | 8.33 | 49668 | 32.43 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-002 | 1 | 1 | 0 | 07/08/10 09:18:10 | 12.18 | 9.02 | 7.83 | 47262 | 30.68 |
| 19830-016 | 1 | 2 | 0 | 07/08/10 09:19:01 | 12.19 | 8.90 | 8.33 | 45636 | 29.51 |
| 19830-015 | 1 | 3 | 0 | 07/08/10 09:19:15 | 12.15 | 8.87 | 8.29 | 46911 | 30.43 |
| 19830-017 | 1 | 4 | 0 | 07/08/10 09:19:32 | 12.07 | 8.82 | 8.19 | 46264 | 29.96 |
| 19830-001 | 1 | 5 | 0 | 07/08/10 09:20:30 | 12.05 | 8.69 | 7.81 | 47159 | 30.60 |
| 19830-011 | 1 | 6 | 0 | 07/08/10 09:20:53 | 12.67 | 7.23 | 7.93 | 47070 | 30.56 |
| 19830-014 | 1 | 7 | 0 | 07/08/10 09:22:06 | 12.29 | 8.15 | 8.26 | 47469 | 30.84 |
| 19830-009 | 1 | 8 | 0 | 07/08/10 09:29:21 | 14.38 | 8.33 | 7.82 | 47176 | 30.69 |
| 19830-012 | 1 | 9 | 0 | 07/08/10 09:29:54 | 14.15 | 8.50 | 7.81 | 47278 | 30.76 |
| 19830-010 | 1 | 10 | 0 | 07/08/10 09:30:18 | 13.88 | 8.61 | 7.83 | 47131 | 30.65 |
| 19830-008 | 1 | 11 | 0 | 07/08/10 09:30:30 | 14.05 | 8.60 | 8.01 | 47111 | 30.64 |
| 19830-006 | 1 | 12 | 0 | 07/08/10 09:30:40 | 14.20 | 8.61 | 7.91 | 46000 | 29.84 |
| 19830-004 | 1 | 13 | 0 | 07/08/10 09:31:05 | 13.59 | 8.65 | 7.97 | 47053 | 30.58 |
| 19830-013 | 1 | 14 | 0 | 07/08/10 09:31:21 | 13.66 | 8.59 | 8.00 | 47201 | 30.69 |
| 19830-000 | 1 | 15 | 0 | 07/08/10 09:31:35 | 13.77 | 8.53 | 7.87 | 47259 | 30.74 |
| 19830-005 | 1 | 16 | 0 | 07/08/10 09:31:51 | 14.04 | 8.66 | 7.77 | 45186 | 29.25 |
| 19830-007 | 1 | 17 | 0 | 07/08/10 09:32:15 | 13.82 | 8.63 | 7.74 | 47254 | 30.73 |
| 19830-003 | 1 | 18 | 0 | 07/08/10 09:32:33 | 13.94 | 8.61 | 7.81 | 47370 | 30.82 |
| 19830-009 | 2 | 19 | 0 | 07/08/10 09:35:41 | 15.22 | 8.35 | 7.80 | 47012 | 30.59 |
| 19830-016 | 2 | 20 | 0 | 07/08/10 09:36:07 | 14.89 | 6.98 | 7.85 | 46914 | 30.52 |
| 19830-007 | 2 | 21 | 0 | 07/08/10 09:36:19 | 15.13 | 6.67 | 7.77 | 47011 | 30.59 |
| 19830-015 | 2 | 22 | 0 | 07/08/10 09:36:41 | 14.94 | 7.89 | 8.08 | 46725 | 30.38 |
| 19830-008 | 2 | 23 | 0 | 07/08/10 09:37:02 | 14.72 | 7.55 | 7.64 | 46967 | 30.55 |
| 19830-002 | 2 | 24 | 0 | 07/08/10 09:37:27 | 14.98 | 7.59 | 7.71 | 46912 | 30.52 |
| 19830-012 | 2 | 25 | 0 | 07/08/10 09:37:43 | 14.98 | 7.98 | 7.85 | 46912 | 30.52 |
| 19830-004 | 2 | 26 | 0 | 07/08/10 09:37:59 | 15.02 | 8.13 | 7.84 | 47082 | 30.64 |
| 19830-000 | 2 | 27 | 0 | 07/08/10 09:38:35 | 13.20 | 8.72 | 7.80 | 47056 | 30.57 |
| 19830-003 | 2 | 28 | 0 | 07/08/10 09:38:56 | 14.66 | 8.27 | 7.74 | 47075 | 30.63 |
| 19830-011 | 2 | 29 | 0 | 07/08/10 09:39:18 | 14.71 | 8.22 | 7.96 | 46988 | 30.57 |
| 19830-017 | 2 | 30 | 0 | 07/08/10 09:39:41 | 14.72 | 8.39 | 7.93 | 46871 | 30.48 |
| 19830-014 | 2 | 31 | 0 | 07/08/10 09:39:59 | 14.56 | 8.45 | 8.06 | 46989 | 30.56 |
| 19830-001 | 2 | 32 | 0 | 07/08/10 09:40:20 | 14.61 | 8.44 | 7.72 | 47114 | 30.65 |
| 19830-013 | 2 | 33 | 0 | 07/08/10 09:40:36 | 14.44 | 8.45 | 7.95 | 47074 | 30.62 |
| 19830-010 | 2 | 34 | 0 | 07/08/10 09:40:58 | 14.73 | 8.45 | 7.88 | 47085 | 30.64 |
| 19830-006 | 2 | 35 | 0 | 07/08/10 09:41:22 | 14.83 | 8.46 | 7.79 | 47173 | 30.70 |
| 19830-005 | 2 | 36 | 0 | 07/08/10 09:41:50 | 15.06 | 8.26 | 7.72 | 47085 | 30.64 |
| 19830-013 | 3 | 37 | 0 | 07/08/10 09:42:10 | 15.39 | 8.19 | 7.97 | 47162 | 30.71 |
| 19830-009 | 3 | 38 | 0 | 07/08/10 09:42:26 | 15.44 | 8.21 | 7.83 | 47022 | 30.61 |
| 19830-017 | 3 | 39 | 0 | 07/08/10 09:42:45 | 15.46 | 8.23 | 7.91 | 46990 | 30.58 |
| 19830-016 | 3 | 40 | 0 | 07/08/10 09:43:08 | 14.98 | 8.31 | 8.07 | 47056 | 30.62 |
| 19830-000 | 3 | 41 | 0 | 07/08/10 09:43:27 | 15.31 | 8.25 | 7.82 | 47082 | 30.65 |
| 19830-010 | 3 | 42 | 0 | 07/08/10 09:43:43 | 15.19 | 8.30 | 7.77 | 46956 | 30.55 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3 | 43 | 0 | 07/08/10 09:44:08 | 14.47 | 8.49 | 7.77 | 47046 | 30.60 |
| 19830-014 | 3 | 44 | 0 | 07/08/10 09:44:26 | 15.25 | 8.24 | 7.97 | 47253 | 30.77 |
| 19830-004 | 3 | 45 | 0 | 07/08/10 09:44:42 | 15.15 | 8.13 | 7.92 | 47001 | 30.58 |
| 19830-006 | 3 | 46 | 0 | 07/08/10 09:44:57 | 15.07 | 8.20 | 7.80 | 46972 | 30.56 |
| 19830-005 | 3 | 47 | 0 | 07/08/10 09:45:15 | 15.29 | 8.22 | 7.73 | 47086 | 30.65 |
| 19830-011 | 3 | 48 | 0 | 07/08/10 09:45:27 | 15.24 | 8.20 | 7.76 | 47081 | 30.64 |
| 19830-002 | 3 | 49 | 0 | 07/08/10 09:45:43 | 14.68 | 8.27 | 7.85 | 46859 | 30.47 |
| 19830-012 | 3 | 50 | 0 | 07/08/10 09:46:00 | 14.96 | 8.07 | 7.88 | 47033 | 30.60 |
| 19830-001 | 3 | 51 | 0 | 07/08/10 09:46:43 | 12.13 | 8.89 | 7.85 | 47455 | 30.82 |
| 19830-003 | 3 | 52 | 0 | 07/08/10 09:46:56 | 12.07 | 8.90 | 7.89 | 47478 | 30.83 |
| 19830-007 | 3 | 53 | 0 | 07/08/10 09:47:20 | 12.01 | 8.98 | 7.74 | 46627 | 30.22 |
| 19830-015 | 3 | 54 | 0 | 07/08/10 09:47:37 | 12.10 | 8.92 | 8.19 | 46272 | 29.97 |
| 19830-006 | 4 | 55 | 0 | 07/08/10 09:47:56 | 12.13 | 8.89 | 7.88 | 47346 | 30.74 |
| 19830-011 | 4 | 56 | 0 | 07/08/10 09:48:19 | 11.94 | 8.92 | 7.91 | 47410 | 30.78 |
| 19830-012 | 4 | 57 | 0 | 07/08/10 09:48:43 | 11.94 | 8.92 | 7.97 | 47386 | 30.76 |
| 19830-010 | 4 | 58 | 0 | 07/08/10 09:48:57 | 11.93 | 8.95 | 7.93 | 47574 | 30.90 |
| 19830-015 | 4 | 59 | 0 | 07/08/10 09:49:12 | 11.74 | 9.01 | 8.12 | 47713 | 30.99 |
| 19830-009 | 4 | 60 | 0 | 07/08/10 09:49:25 | 11.69 | 9.11 | 7.97 | 47655 | 30.94 |
| 19830-001 | 4 | 61 | 0 | 07/08/10 09:49:39 | 11.86 | 9.12 | 8.00 | 47779 | 31.04 |
| 19830-016 | 4 | 62 | 0 | 07/08/10 09:49:55 | 11.98 | 9.03 | 8.25 | 47433 | 30.80 |
| 19830-008 | 4 | 63 | 0 | 07/08/10 09:50:10 | 11.91 | 8.97 | 8.07 | 47456 | 30.81 |
| 19830-004 | 4 | 64 | 0 | 07/08/10 09:50:24 | 12.02 | 8.97 | 8.06 | 47515 | 30.86 |
| 19830-007 | 4 | 65 | 0 | 07/08/10 09:50:39 | 12.19 | 8.92 | 7.73 | 47502 | 30.86 |
| 19830-014 | 4 | 66 | 0 | 07/08/10 09:50:55 | 12.34 | 8.17 | 8.06 | 47352 | 30.75 |
| 19830-000 | 4 | 67 | 0 | 07/08/10 09:51:15 | 12.22 | 8.60 | 7.82 | 47320 | 30.73 |
| 19830-017 | 4 | 68 | 0 | 07/08/10 09:51:31 | 12.26 | 8.75 | 7.98 | 47275 | 30.69 |
| 19830-013 | 4 | 69 | 0 | 07/08/10 09:51:46 | 12.43 | 8.64 | 8.11 | 47364 | 30.77 |
| 19830-002 | 4 | 70 | 0 | 07/08/10 09:52:03 | 12.40 | 8.68 | 8.01 | 47143 | 30.61 |
| 19830-005 | 4 | 71 | 0 | 07/08/10 09:52:20 | 12.28 | 8.50 | 7.70 | 47235 | 30.67 |
| 19830-003 | 4 | 72 | 0 | 07/08/10 09:52:39 | 12.38 | 8.51 | 7.83 | 47337 | 30.74 |
| 19830-016 | 5 | 73 | 0 | 07/08/10 09:52:56 | 12.27 | 8.79 | 8.21 | 47252 | 30.68 |
| 19830-003 | 5 | 74 | 0 | 07/08/10 09:53:16 | 12.23 | 8.66 | 7.89 | 47241 | 30.67 |
| 19830-000 | 5 | 75 | 0 | 07/08/10 09:53:29 | 12.38 | 8.49 | 7.84 | 47362 | 30.76 |
| 19830-013 | 5 | 76 | 0 | 07/08/10 09:53:41 | 12.49 | 8.70 | 8.05 | 47365 | 30.77 |
| 19830-001 | 5 | 77 | 0 | 07/08/10 09:53:55 | 12.61 | 8.74 | 8.10 | 47234 | 30.68 |
| 19830-002 | 5 | 78 | 0 | 07/08/10 09:54:08 | 12.47 | 8.62 | 8.11 | 47115 | 30.59 |
| 19830-004 | 5 | 79 | 0 | 07/08/10 09:54:20 | 12.43 | 8.45 | 8.06 | 47274 | 30.70 |
| 19830-012 | 5 | 80 | 0 | 07/08/10 09:54:38 | 12.59 | 8.69 | 8.02 | 47293 | 30.72 |
| 19830-005 | 5 | 81 | 0 | 07/08/10 09:55:53 | 12.66 | 8.61 | 7.72 | 47021 | 30.53 |
| 19830-011 | 5 | 82 | 0 | 07/08/10 09:56:12 | 12.71 | 8.66 | 7.93 | 46629 | 30.25 |
| 19830-010 | 5 | 83 | 0 | 07/08/10 09:56:27 | 12.93 | 8.58 | 8.04 | 47341 | 30.77 |
| 19830-017 | 5 | 84 | 0 | 07/08/10 09:56:46 | 13.18 | 8.48 | 8.03 | 47297 | 30.75 |
| 19830-009 | 5 | 85 | 0 | 07/08/10 09:57:14 | 14.97 | 8.10 | 7.71 | 47044 | 30.61 |
| 19830-006 | 5 | 86 | 0 | 07/08/10 09:58:08 | 13.30 | 8.01 | 7.64 | 47285 | 30.74 |
| 19830-008 | 5 | 87 | 0 | 07/08/10 09:58:30 | 13.01 | 8.41 | 7.96 | 47188 | 30.66 |
| 19830-007 | 5 | 88 | 0 | 07/08/10 09:58:44 | 12.97 | 8.61 | 7.82 | 47170 | 30.65 |
| 19830-014 | 5 | 89 | 0 | 07/08/10 09:59:10 | 12.30 | 8.83 | 8.20 | 47324 | 30.73 |
| 19830-015 | 5 | 90 | 0 | 07/08/10 09:59:36 | 12.60 | 8.74 | 8.18 | 47390 | 30.79 |
| 19830-005 | 6 | 91 | 0 | 07/08/10 10:00:02 | 12.86 | 8.71 | 7.81 | 47259 | 30.71 |
| 19830-007 | 6 | 92 | 0 | 07/08/10 10:00:23 | 12.87 | 8.72 | 7.78 | 47242 | 30.70 |
| 19830-002 | 6 | 93 | 0 | 07/08/10 10:00:40 | 12.93 | 8.68 | 7.89 | 47244 | 30.70 |
| 19830-009 | 6 | 94 | 0 | 07/08/10 10:00:58 | 13.02 | 8.62 | 7.82 | 47252 | 30.71 |
| 19830-013 | 6 | 95 | 0 | 07/08/10 10:01:14 | 13.06 | 8.61 | 8.10 | 47251 | 30.71 |
| 19830-004 | 6 | 96 | 0 | 07/08/10 10:01:31 | 12.98 | 8.68 | 8.00 | 47214 | 30.68 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 6 | 97 | 0 | 07/08/10 10:02:06 | 12.18 | 8.92 | 8.03 | 47842 | 31.10 |
| 19830-015 | 6 | 98 | 0 | 07/08/10 10:02:28 | 12.08 | 8.87 | 8.16 | 47481 | 30.84 |
| 19830-014 | 6 | 99 | 0 | 07/08/10 10:02:44 | 12.01 | 8.82 | 8.28 | 47505 | 30.85 |
| 19830-003 | 6 | 100 | 0 | 07/08/10 10:02:57 | 12.03 | 8.82 | 8.03 | 47653 | 30.96 |
| 19830-010 | 6 | 101 | 0 | 07/08/10 10:03:10 | 12.03 | 8.86 | 7.98 | 47595 | 30.92 |
| 19830-000 | 6 | 102 | 0 | 07/08/10 10:03:23 | 12.04 | 8.93 | 7.89 | 47573 | 30.90 |
| 19830-016 | 6 | 103 | 0 | 07/08/10 10:03:34 | 12.02 | 8.95 | 8.11 | 47530 | 30.87 |
| 19830-001 | 6 | 104 | 0 | 07/08/10 10:03:53 | 12.04 | 8.86 | 7.85 | 47463 | 30.82 |
| 19830-017 | 6 | 105 | 0 | 07/08/10 10:04:06 | 11.94 | 8.86 | 7.95 | 47512 | 30.85 |
| 19830-008 | 6 | 106 | 0 | 07/08/10 10:04:15 | 11.92 | 8.92 | 7.89 | 47436 | 30.80 |
| 19830-011 | 6 | 107 | 0 | 07/08/10 10:04:27 | 11.90 | 8.77 | 7.87 | 47605 | 30.92 |
| 19830-006 | 6 | 108 | 0 | 07/08/10 10:04:43 | 12.01 | 8.78 | 7.84 | 47609 | 30.93 |
| 19830-015 | 7 | 109 | 0 | 07/08/10 10:04:58 | 12.02 | 8.96 | 8.03 | 48195 | 31.35 |
| 19830-017 | 7 | 110 | 0 | 07/08/10 10:05:17 | 12.00 | 8.90 | 8.22 | 48006 | 31.21 |
| 19830-003 | 7 | 111 | 0 | 07/08/10 10:05:32 | 11.95 | 8.94 | 8.00 | 47649 | 30.95 |
| 19830-008 | 7 | 112 | 0 | 07/08/10 10:05:52 | 12.04 | 9.02 | 8.05 | 46702 | 30.27 |
| 19830-006 | 7 | 113 | 0 | 07/08/10 10:06:25 | 12.75 | 8.77 | 7.86 | 47054 | 30.55 |
| 19830-012 | 7 | 114 | 0 | 07/08/10 10:06:55 | 12.59 | 8.73 | 7.98 | 46319 | 30.02 |
| 19830-004 | 7 | 115 | 0 | 07/08/10 10:07:05 | 12.57 | 8.65 | 7.99 | 47168 | 30.63 |
| 19830-011 | 7 | 116 | 0 | 07/08/10 10:07:25 | 12.66 | 8.62 | 8.15 | 47172 | 30.64 |
| 19830-014 | 7 | 117 | 0 | 07/08/10 10:07:38 | 12.65 | 8.61 | 8.20 | 47210 | 30.66 |
| 19830-005 | 7 | 118 | 0 | 07/08/10 10:07:51 | 12.58 | 8.67 | 7.94 | 47154 | 30.62 |
| 19830-001 | 7 | 119 | 0 | 07/08/10 10:08:15 | 12.15 | 8.82 | 7.75 | 47129 | 30.58 |
| 19830-000 | 7 | 120 | 0 | 07/08/10 10:08:29 | 12.43 | 8.75 | 7.80 | 47294 | 30.72 |
| 19830-009 | 7 | 121 | 0 | 07/08/10 10:08:45 | 12.27 | 8.85 | 7.76 | 47166 | 30.62 |
| 19830-010 | 7 | 122 | 0 | 07/08/10 10:08:58 | 12.21 | 8.72 | 7.88 | 47266 | 30.69 |
| 19830-007 | 7 | 123 | 0 | 07/08/10 10:09:16 | 12.28 | 8.38 | 7.65 | 47329 | 30.73 |
| 19830-002 | 7 | 124 | 0 | 07/08/10 10:09:33 | 12.28 | 8.25 | 7.67 | 47303 | 30.72 |
| 19830-013 | 7 | 125 | 0 | 07/08/10 10:09:49 | 12.27 | 8.46 | 7.95 | 47526 | 30.88 |
| 19830-016 | 7 | 126 | 0 | 07/08/10 10:10:05 | 12.44 | 8.64 | 8.17 | 47469 | 30.84 |
| 19830-017 | 8 | 127 | 0 | 07/08/10 10:10:21 | 12.52 | 8.73 | 7.96 | 47325 | 30.74 |
| 19830-013 | 8 | 128 | 0 | 07/08/10 10:10:35 | 12.74 | 8.73 | 8.01 | 47252 | 30.70 |
| 19830-010 | 8 | 129 | 0 | 07/08/10 10:10:55 | 12.70 | 8.72 | 8.07 | 47161 | 30.63 |
| 19830-007 | 8 | 130 | 0 | 07/08/10 10:11:11 | 12.81 | 8.74 | 7.86 | 47206 | 30.67 |
| 19830-011 | 8 | 131 | 0 | 07/08/10 10:11:24 | 12.92 | 8.65 | 8.13 | 47234 | 30.69 |
| 19830-002 | 8 | 132 | 0 | 07/08/10 10:11:41 | 12.87 | 8.60 | 8.01 | 46870 | 30.43 |
| 19830-004 | 8 | 133 | 0 | 07/08/10 10:11:56 | 12.91 | 8.58 | 8.00 | 47216 | 30.68 |
| 19830-003 | 8 | 134 | 0 | 07/08/10 10:12:13 | 12.97 | 8.63 | 7.97 | 47247 | 30.70 |
| 19830-005 | 8 | 135 | 0 | 07/08/10 10:12:43 | 12.84 | 8.60 | 7.75 | 47109 | 30.60 |
| 19830-012 | 8 | 136 | 0 | 07/08/10 10:13:48 | 12.65 | 8.35 | 8.05 | 44944 | 29.03 |
| 19830-006 | 8 | 137 | 0 | 07/08/10 10:14:18 | 12.60 | 8.65 | 7.87 | 47349 | 30.76 |
| 19830-001 | 8 | 138 | 0 | 07/08/10 10:14:30 | 12.53 | 8.80 | 7.88 | 47264 | 30.70 |
| 19830-014 | 8 | 139 | 0 | 07/08/10 10:14:47 | 12.51 | 8.77 | 8.20 | 46440 | 30.10 |
| 19830-000 | 8 | 140 | 0 | 07/08/10 10:15:05 | 12.84 | 8.67 | 7.95 | 47328 | 30.76 |
| 19830-009 | 8 | 141 | 0 | 07/08/10 10:15:22 | 12.93 | 8.73 | 7.89 | 47288 | 30.73 |
| 19830-008 | 8 | 142 | 0 | 07/08/10 10:15:41 | 12.67 | 8.77 | 8.05 | 47248 | 30.69 |
| 19830-015 | 8 | 143 | 0 | 07/08/10 10:16:03 | 12.76 | 8.64 | 8.22 | 47336 | 30.76 |
| 19830-016 | 8 | 144 | 0 | 07/08/10 10:16:18 | 12.82 | 8.50 | 8.32 | 47229 | 30.68 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 1 | 07/09/10 09:11:58 | 11.62 | 7.94 | 7.50 | 47539 | 30.86 |
| 19830-016 | 1 | 2 | 1 | 07/09/10 09:12:41 | 11.60 | 7.84 | 7.93 | 45183 | 29.16 |
| 19830-015 | 1 | 3 | 1 | 07/09/10 09:13:01 | 11.57 | 7.66 | 7.58 | 47007 | 30.47 |
| 19830-017 | 1 | 4 | 1 | 07/09/10 09:13:16 | 11.56 | 7.23 | 7.51 | 47030 | 30.49 |
| 19830-001 | 1 | 5 | 1 | 07/09/10 09:13:28 | 11.57 | 6.79 | 7.55 | 47500 | 30.83 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 1 | 6 | 1 | 07/09/10 09:14:13 | 11.62 | 5.02 | 7.42 | 47594 | 30.90 |
| 19830-014 | 1 | 7 | 1 | 07/09/10 09:15:47 | 11.70 | 7.33 | 7.67 | 47790 | 31.04 |
| 19830-009 | 1 | 8 | 1 | 07/09/10 09:16:08 | 11.71 | 7.51 | 7.69 | 47517 | 30.85 |
| 19830-012 | 1 | 9 | 1 | 07/09/10 09:16:25 | 11.81 | 7.60 | 7.66 | 47886 | 31.12 |
| 19830-010 | 1 | 10 | 1 | 07/09/10 09:16:52 | 12.11 | 7.71 | 7.66 | 47633 | 30.95 |
| 19830-008 | 1 | 11 | 1 | 07/09/10 09:17:07 | 12.15 | 7.74 | 7.84 | 47604 | 30.93 |
| 19830-006 | 1 | 12 | 1 | 07/09/10 09:17:43 | 12.26 | 6.59 | 7.30 | 47640 | 30.96 |
| 19830-004 | 1 | 13 | 1 | 07/09/10 09:18:14 | 12.34 | 7.13 | 7.52 | 47538 | 30.89 |
| 19830-013 | 1 | 14 | 1 | 07/09/10 09:18:36 | 12.35 | 7.37 | 7.71 | 47593 | 30.93 |
| 19830-000 | 1 | 15 | 1 | 07/09/10 09:20:19 | 12.38 | 8.15 | 7.62 | 47807 | 31.08 |
| 19830-005 | 1 | 16 | 1 | 07/09/10 09:20:43 | 12.43 | 7.92 | 7.51 | 47838 | 31.11 |
| 19830-007 | 1 | 17 | 1 | 07/09/10 09:21:00 | 12.48 | 7.71 | 7.43 | 47912 | 31.16 |
| 19830-003 | 1 | 18 | 1 | 07/09/10 09:21:31 | 12.72 | 6.79 | 7.27 | 47802 | 31.09 |
| 19830-009 | 2 | 19 | 1 | 07/09/10 09:35:20 | 11.50 | 7.08 | 7.52 | 47587 | 30.89 |
| 19830-016 | 2 | 20 | 1 | 07/09/10 09:35:39 | 11.47 | 7.11 | 7.95 | 47575 | 30.88 |
| 19830-007 | 2 | 21 | 1 | 07/09/10 09:36:12 | 11.58 | 6.92 | 7.38 | 47241 | 30.64 |
| 19830-015 | 2 | 22 | 1 | 07/09/10 09:36:38 | 11.63 | 6.85 | 7.65 | 47266 | 30.66 |
| 19830-008 | 2 | 23 | 1 | 07/09/10 09:37:06 | 11.69 | 5.72 | 7.29 | 47256 | 30.66 |
| 19830-002 | 2 | 24 | 1 | 07/09/10 09:37:50 | 11.71 | 6.97 | 7.47 | 47273 | 30.67 |
| 19830-012 | 2 | 25 | 1 | 07/09/10 09:38:13 | 11.74 | 7.23 | 7.57 | 47493 | 30.83 |
| 19830-004 | 2 | 26 | 1 | 07/09/10 09:38:38 | 11.87 | 7.27 | 7.50 | 47586 | 30.90 |
| 19830-000 | 2 | 27 | 1 | 07/09/10 09:39:07 | 12.19 | 7.73 | 7.56 | 47714 | 31.01 |
| 19830-003 | 2 | 28 | 1 | 07/09/10 09:39:44 | 12.26 | 7.12 | 7.38 | 47234 | 30.66 |
| 19830-011 | 2 | 29 | 1 | 07/09/10 09:40:13 | 12.32 | 7.26 | 7.82 | 47475 | 30.84 |
| 19830-017 | 2 | 30 | 1 | 07/09/10 09:40:56 | 12.37 | 7.30 | 7.60 | 47456 | 30.83 |
| 19830-014 | 2 | 31 | 1 | 07/09/10 09:42:27 | 12.32 | 7.11 | 7.77 | 47620 | 30.95 |
| 19830-001 | 2 | 32 | 1 | 07/09/10 09:42:55 | 12.22 | 7.08 | 7.51 | 47587 | 30.92 |
| 19830-013 | 2 | 33 | 1 | 07/09/10 09:43:15 | 12.24 | 7.14 | 7.77 | 47664 | 30.97 |
| 19830-010 | 2 | 34 | 1 | 07/09/10 09:43:39 | 12.43 | 7.36 | 7.67 | 47630 | 30.96 |
| 19830-006 | 2 | 35 | 1 | 07/09/10 09:44:17 | 11.48 | 7.34 | 7.41 | 47655 | 30.93 |
| 19830-005 | 2 | 36 | 1 | 07/09/10 09:44:37 | 11.41 | 7.31 | 7.40 | 47729 | 30.98 |
| 19830-013 | 3 | 37 | 1 | 07/09/10 09:45:09 | 11.41 | 7.40 | 7.75 | 47770 | 31.01 |
| 19830-009 | 3 | 38 | 1 | 07/09/10 09:45:44 | 11.48 | 7.65 | 7.61 | 47619 | 30.91 |
| 19830-017 | 3 | 39 | 1 | 07/09/10 09:46:05 | 11.53 | 7.62 | 7.67 | 47400 | 30.75 |
| 19830-016 | 3 | 40 | 1 | 07/09/10 09:46:24 | 11.56 | 7.65 | 7.85 | 47784 | 31.03 |
| 19830-000 | 3 | 41 | 1 | 07/09/10 09:46:50 | 11.69 | 8.18 | 7.65 | 47675 | 30.96 |
| 19830-010 | 3 | 42 | 1 | 07/09/10 09:47:17 | 11.77 | 8.21 | 7.61 | 47649 | 30.94 |
| 19830-008 | 3 | 43 | 1 | 07/09/10 09:47:46 | 12.02 | 7.73 | 7.60 | 47690 | 30.98 |
| 19830-014 | 3 | 44 | 1 | 07/09/10 09:48:12 | 12.09 | 7.26 | 7.58 | 47561 | 30.89 |
| 19830-004 | 3 | 45 | 1 | 07/09/10 09:48:43 | 12.02 | 7.36 | 7.53 | 47674 | 30.97 |
| 19830-006 | 3 | 46 | 1 | 07/09/10 09:48:59 | 12.20 | 7.32 | 7.38 | 47626 | 30.95 |
| 19830-005 | 3 | 47 | 1 | 07/09/10 09:49:18 | 12.25 | 6.93 | 7.37 | 47602 | 30.93 |
| 19830-011 | 3 | 48 | 1 | 07/09/10 09:49:50 | 11.91 | 7.25 | 7.65 | 47806 | 31.06 |
| 19830-002 | 3 | 49 | 1 | 07/09/10 09:50:15 | 12.23 | 7.13 | 7.60 | 47519 | 30.87 |
| 19830-012 | 3 | 50 | 1 | 07/09/10 09:50:42 | 12.34 | 6.98 | 7.66 | 47478 | 30.84 |
| 19830-001 | 3 | 51 | 1 | 07/09/10 09:51:00 | 12.39 | 7.19 | 7.67 | 48108 | 31.30 |
| 19830-003 | 3 | 52 | 1 | 07/09/10 09:51:38 | 12.50 | 7.62 | 7.64 | 48010 | 31.24 |
| 19830-007 | 3 | 53 | 1 | 07/09/10 09:52:08 | 12.52 | 6.47 | 7.25 | 47792 | 31.08 |
| 19830-015 | 3 | 54 | 1 | 07/09/10 09:52:31 | 12.51 | 6.78 | 7.86 | 47826 | 31.10 |
| 19830-006 | 4 | 55 | 1 | 07/09/10 09:53:09 | 12.44 | 6.59 | 7.33 | 47737 | 31.04 |
| 19830-011 | 4 | 56 | 1 | 07/09/10 09:53:39 | 12.35 | 7.02 | 7.72 | 47726 | 31.02 |
| 19830-012 | 4 | 57 | 1 | 07/09/10 09:53:57 | 12.30 | 7.38 | 7.76 | 47815 | 31.09 |
| 19830-010 | 4 | 58 | 1 | 07/09/10 09:54:12 | 12.27 | 7.64 | 7.68 | 48177 | 31.35 |
| 19830-015 | 4 | 59 | 1 | 07/09/10 10:01:52 | 12.24 | 7.84 | 7.80 | 48068 | 31.27 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 4 | 60 | 1 | 07/09/10 10:02:19 | 12.05 | 7.64 | 7.68 | 47976 | 31.19 |
| 19830-001 | 4 | 61 | 1 | 07/09/10 10:02:39 | 12.04 | 7.49 | 7.78 | 48029 | 31.23 |
| 19830-016 | 4 | 62 | 1 | 07/09/10 10:02:52 | 12.05 | 7.35 | 7.86 | 47968 | 31.19 |
| 19830-008 | 4 | 63 | 1 | 07/09/10 10:03:13 | 12.01 | 7.34 | 7.68 | 47962 | 31.18 |
| 19830-004 | 4 | 64 | 1 | 07/09/10 10:03:37 | 11.92 | 7.26 | 7.55 | 47879 | 31.12 |
| 19830-007 | 4 | 65 | 1 | 07/09/10 10:04:25 | 12.10 | 5.31 | 7.12 | 47759 | 31.04 |
| 19830-014 | 4 | 66 | 1 | 07/09/10 10:05:03 | 12.10 | 6.65 | 7.62 | 47796 | 31.06 |
| 19830-000 | 4 | 67 | 1 | 07/09/10 10:05:34 | 12.06 | 7.41 | 7.52 | 47827 | 31.08 |
| 19830-017 | 4 | 68 | 1 | 07/09/10 10:06:05 | 12.05 | 6.79 | 7.65 | 47550 | 30.88 |
| 19830-013 | 4 | 69 | 1 | 07/09/10 10:06:42 | 12.05 | 7.47 | 7.74 | 47754 | 31.03 |
| 19830-002 | 4 | 70 | 1 | 07/09/10 10:06:58 | 12.05 | 7.53 | 7.71 | 47628 | 30.94 |
| 19830-005 | 4 | 71 | 1 | 07/09/10 10:07:26 | 12.01 | 6.98 | 7.33 | 47711 | 31.00 |
| 19830-003 | 4 | 72 | 1 | 07/09/10 10:07:56 | 12.05 | 7.37 | 7.61 | 47765 | 31.04 |
| 19830-016 | 5 | 73 | 1 | 07/09/10 10:08:19 | 12.03 | 7.52 | 7.82 | 47741 | 31.02 |
| 19830-003 | 5 | 74 | 1 | 07/09/10 10:08:55 | 12.03 | 6.66 | 7.43 | 47665 | 30.97 |
| 19830-000 | 5 | 75 | 1 | 07/09/10 10:09:25 | 12.06 | 7.37 | 7.54 | 47760 | 31.04 |
| 19830-013 | 5 | 76 | 1 | 07/09/10 10:09:35 | 12.06 | 7.61 | 7.57 | 47685 | 30.98 |
| 19830-001 | 5 | 77 | 1 | 07/09/10 10:09:48 | 12.04 | 7.49 | 7.65 | 47562 | 30.89 |
| 19830-002 | 5 | 78 | 1 | 07/09/10 10:10:16 | 12.01 | 7.14 | 7.67 | 47593 | 30.91 |
| 19830-004 | 5 | 79 | 1 | 07/09/10 10:10:35 | 11.98 | 7.05 | 7.55 | 47650 | 30.95 |
| 19830-012 | 5 | 80 | 1 | 07/09/10 10:10:46 | 11.91 | 7.21 | 7.65 | 47712 | 30.99 |
| 19830-005 | 5 | 81 | 1 | 07/09/10 10:11:42 | 12.03 | 6.91 | 7.33 | 47747 | 31.03 |
| 19830-011 | 5 | 82 | 1 | 07/09/10 10:12:13 | 11.96 | 7.22 | 7.77 | 47755 | 31.03 |
| 19830-010 | 5 | 83 | 1 | 07/09/10 10:12:32 | 11.91 | 7.41 | 7.74 | 47731 | 31.01 |
| 19830-017 | 5 | 84 | 1 | 07/09/10 10:12:50 | 11.91 | 7.46 | 7.61 | 47510 | 30.85 |
| 19830-009 | 5 | 85 | 1 | 07/09/10 10:13:26 | 11.88 | 6.15 | 7.42 | 47563 | 30.89 |
| 19830-006 | 5 | 86 | 1 | 07/09/10 10:13:52 | 11.86 | 5.59 | 7.24 | 47663 | 30.96 |
| 19830-008 | 5 | 87 | 1 | 07/09/10 10:14:30 | 11.84 | 7.58 | 7.72 | 47715 | 30.99 |
| 19830-007 | 5 | 88 | 1 | 07/09/10 10:15:04 | 11.81 | 7.45 | 7.36 | 47343 | 30.72 |
| 19830-014 | 5 | 89 | 1 | 07/09/10 10:15:30 | 11.88 | 7.62 | 7.67 | 47874 | 31.11 |
| 19830-015 | 5 | 90 | 1 | 07/09/10 10:15:46 | 11.83 | 7.73 | 7.81 | 47807 | 31.06 |
| 19830-005 | 6 | 91 | 1 | 07/09/10 10:16:04 | 11.80 | 7.80 | 7.57 | 47735 | 31.01 |
| 19830-007 | 6 | 92 | 1 | 07/09/10 10:16:33 | 11.75 | 7.56 | 7.37 | 47746 | 31.01 |
| 19830-002 | 6 | 93 | 1 | 07/09/10 10:16:53 | 11.73 | 7.52 | 7.63 | 47638 | 30.93 |
| 19830-009 | 6 | 94 | 1 | 07/09/10 10:17:28 | 11.69 | 6.93 | 7.53 | 47635 | 30.93 |
| 19830-013 | 6 | 95 | 1 | 07/09/10 10:17:47 | 11.63 | 7.05 | 7.79 | 47510 | 30.84 |
| 19830-004 | 6 | 96 | 1 | 07/09/10 10:18:02 | 11.60 | 7.42 | 7.69 | 47704 | 30.97 |
| 19830-012 | 6 | 97 | 1 | 07/09/10 10:18:44 | 12.02 | 7.81 | 7.74 | 48005 | 31.21 |
| 19830-015 | 6 | 98 | 1 | 07/09/10 10:18:59 | 11.95 | 7.76 | 7.71 | 47924 | 31.15 |
| 19830-014 | 6 | 99 | 1 | 07/09/10 10:19:11 | 11.91 | 7.57 | 7.76 | 47876 | 31.11 |
| 19830-003 | 6 | 100 | 1 | 07/09/10 10:19:23 | 11.92 | 7.49 | 7.67 | 47965 | 31.18 |
| 19830-010 | 6 | 101 | 1 | 07/09/10 10:19:48 | 11.93 | 7.59 | 7.69 | 48110 | 31.28 |
| 19830-000 | 6 | 102 | 1 | 07/09/10 10:20:10 | 11.91 | 7.92 | 7.66 | 48048 | 31.24 |
| 19830-016 | 6 | 103 | 1 | 07/09/10 10:20:29 | 11.93 | 8.01 | 7.86 | 48004 | 31.21 |
| 19830-001 | 6 | 104 | 1 | 07/09/10 10:20:48 | 11.99 | 7.73 | 7.69 | 47907 | 31.14 |
| 19830-017 | 6 | 105 | 1 | 07/09/10 10:21:10 | 12.06 | 7.88 | 7.79 | 47915 | 31.15 |
| 19830-008 | 6 | 106 | 1 | 07/09/10 10:21:23 | 12.04 | 7.77 | 7.62 | 47837 | 31.09 |
| 19830-011 | 6 | 107 | 1 | 07/09/10 10:21:38 | 12.02 | 7.24 | 7.62 | 48024 | 31.23 |
| 19830-006 | 6 | 108 | 1 | 07/09/10 10:22:00 | 11.94 | 7.15 | 7.48 | 47997 | 31.20 |
| 19830-015 | 7 | 109 | 1 | 07/09/10 10:22:22 | 11.86 | 7.29 | 7.80 | 48263 | 31.39 |
| 19830-017 | 7 | 110 | 1 | 07/09/10 10:22:44 | 11.79 | 7.70 | 7.85 | 47739 | 31.01 |
| 19830-003 | 7 | 111 | 1 | 07/09/10 10:23:00 | 11.67 | 7.83 | 7.69 | 47942 | 31.15 |
| 19830-008 | 7 | 112 | 1 | 07/09/10 10:23:18 | 11.49 | 7.88 | 7.76 | 48084 | 31.24 |
| 19830-006 | 7 | 113 | 1 | 07/09/10 10:24:14 | 12.35 | 5.92 | 7.30 | 47513 | 30.87 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 114 | 1 | 07/09/10 10:24:51 | 12.31 | 7.44 | 7.71 | 47606 | 30.94 |
| 19830-004 | 7 | 115 | 1 | 07/09/10 10:25:11 | 12.30 | 7.74 | 7.65 | 47613 | 30.94 |
| 19830-011 | 7 | 116 | 1 | 07/09/10 10:25:27 | 12.29 | 7.77 | 7.80 | 47536 | 30.88 |
| 19830-014 | 7 | 117 | 1 | 07/09/10 10:25:52 | 12.23 | 7.83 | 7.86 | 47688 | 30.99 |
| 19830-005 | 7 | 118 | 1 | 07/09/10 10:26:20 | 12.22 | 7.40 | 7.44 | 47642 | 30.96 |
| 19830-001 | 7 | 119 | 1 | 07/09/10 10:26:37 | 12.18 | 7.31 | 7.54 | 47461 | 30.83 |
| 19830-000 | 7 | 120 | 1 | 07/09/10 10:26:59 | 12.20 | 7.83 | 7.59 | 47635 | 30.95 |
| 19830-009 | 7 | 121 | 1 | 07/09/10 10:27:27 | 11.89 | 7.85 | 7.58 | 47663 | 30.96 |
| 19830-010 | 7 | 122 | 1 | 07/09/10 10:27:40 | 11.79 | 7.67 | 7.55 | 47712 | 30.99 |
| 19830-007 | 7 | 123 | 1 | 07/09/10 10:27:56 | 11.70 | 7.24 | 7.37 | 47776 | 31.03 |
| 19830-002 | 7 | 124 | 1 | 07/09/10 10:28:10 | 11.65 | 6.94 | 7.43 | 47696 | 30.97 |
| 19830-013 | 7 | 125 | 1 | 07/09/10 10:28:26 | 11.57 | 7.37 | 7.63 | 47929 | 31.14 |
| 19830-016 | 7 | 126 | 1 | 07/09/10 10:28:39 | 11.56 | 7.63 | 7.75 | 47885 | 31.10 |
| 19830-017 | 8 | 127 | 1 | 07/09/10 10:28:57 | 11.51 | 7.53 | 7.72 | 47745 | 31.00 |
| 19830-013 | 8 | 128 | 1 | 07/09/10 10:29:15 | 11.45 | 7.72 | 7.69 | 47500 | 30.82 |
| 19830-010 | 8 | 129 | 1 | 07/09/10 10:29:39 | 12.18 | 7.73 | 7.75 | 47699 | 31.00 |
| 19830-007 | 8 | 130 | 1 | 07/09/10 10:30:01 | 12.23 | 7.65 | 7.44 | 47536 | 30.88 |
| 19830-011 | 8 | 131 | 1 | 07/09/10 10:30:27 | 12.12 | 7.01 | 7.79 | 47614 | 30.93 |
| 19830-002 | 8 | 132 | 1 | 07/09/10 10:30:44 | 12.14 | 6.74 | 7.67 | 47459 | 30.82 |
| 19830-004 | 8 | 133 | 1 | 07/09/10 10:31:02 | 12.10 | 6.89 | 7.57 | 47625 | 30.94 |
| 19830-003 | 8 | 134 | 1 | 07/09/10 10:31:24 | 12.02 | 7.64 | 7.66 | 47679 | 30.98 |
| 19830-005 | 8 | 135 | 1 | 07/09/10 10:31:59 | 11.95 | 7.01 | 7.36 | 47617 | 30.93 |
| 19830-012 | 8 | 136 | 1 | 07/09/10 10:32:22 | 11.87 | 7.15 | 7.67 | 47694 | 30.98 |
| 19830-006 | 8 | 137 | 1 | 07/09/10 10:32:48 | 11.69 | 7.17 | 7.47 | 47849 | 31.08 |
| 19830-001 | 8 | 138 | 1 | 07/09/10 10:33:14 | 11.59 | 7.28 | 7.63 | 47728 | 30.99 |
| 19830-014 | 8 | 139 | 1 | 07/09/10 10:33:36 | 11.55 | 7.71 | 7.77 | 47804 | 31.04 |
| 19830-000 | 8 | 140 | 1 | 07/09/10 10:33:52 | 11.55 | 7.99 | 7.67 | 47802 | 31.04 |
| 19830-009 | 8 | 141 | 1 | 07/09/10 10:34:26 | 11.52 | 7.78 | 7.68 | 47640 | 30.92 |
| 19830-008 | 8 | 142 | 1 | 07/09/10 10:34:46 | 11.48 | 7.88 | 7.85 | 47780 | 31.02 |
| 19830-015 | 8 | 143 | 1 | 07/09/10 10:35:03 | 11.47 | 8.12 | 7.85 | 47806 | 31.04 |
| 19830-016 | 8 | 144 | 1 | 07/09/10 10:35:23 | 11.50 | 7.64 | 7.73 | 47643 | 30.93 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 2 | 07/10/10 13:24:56 | 13.26 | 7.94 | 7.57 | 47439 | 30.85 |
| 19830-016 | 1 | 2 | 2 | 07/10/10 13:25:27 | 13.13 | 7.55 | 7.70 | 45587 | 29.51 |
| 19830-015 | 1 | 3 | 2 | 07/10/10 13:25:45 | 13.09 | 7.28 | 7.60 | 47548 | 30.92 |
| 19830-017 | 1 | 4 | 2 | 07/10/10 13:26:01 | 13.09 | 7.05 | 7.48 | 47306 | 30.75 |
| 19830-001 | 1 | 5 | 2 | 07/10/10 13:26:13 | 13.12 | 6.45 | 7.46 | 47409 | 30.82 |
| 19830-011 | 1 | 6 | 2 | 07/10/10 13:26:31 | 13.18 | 6.36 | 7.65 | 47570 | 30.94 |
| 19830-014 | 1 | 7 | 2 | 07/10/10 13:26:52 | 13.26 | 6.88 | 7.59 | 47671 | 31.02 |
| 19830-009 | 1 | 8 | 2 | 07/10/10 13:27:10 | 13.29 | 6.72 | 7.56 | 47317 | 30.76 |
| 19830-012 | 1 | 9 | 2 | 07/10/10 13:27:32 | 13.41 | 6.67 | 7.57 | 47604 | 30.97 |
| 19830-010 | 1 | 10 | 2 | 07/10/10 13:27:54 | 13.53 | 7.04 | 7.64 | 47687 | 31.04 |
| 19830-008 | 1 | 11 | 2 | 07/10/10 13:28:11 | 13.55 | 7.39 | 7.76 | 47586 | 30.97 |
| 19830-006 | 1 | 12 | 2 | 07/10/10 13:28:36 | 13.63 | 6.54 | 7.36 | 47541 | 30.94 |
| 19830-004 | 1 | 13 | 2 | 07/10/10 13:28:58 | 13.72 | 6.58 | 7.43 | 47609 | 30.99 |
| 19830-013 | 1 | 14 | 2 | 07/10/10 13:29:23 | 13.79 | 6.85 | 7.68 | 47527 | 30.93 |
| 19830-000 | 1 | 15 | 2 | 07/10/10 13:29:48 | 13.77 | 7.29 | 7.59 | 47687 | 31.05 |
| 19830-005 | 1 | 16 | 2 | 07/10/10 13:30:12 | 13.78 | 7.59 | 7.51 | 47743 | 31.09 |
| 19830-007 | 1 | 17 | 2 | 07/10/10 13:30:30 | 13.79 | 7.45 | 7.41 | 47830 | 31.15 |
| 19830-003 | 1 | 18 | 2 | 07/10/10 13:30:50 | 13.95 | 7.19 | 7.46 | 47813 | 31.14 |
| 19830-009 | 2 | 19 | 2 | 07/10/10 13:31:22 | 13.12 | 7.39 | 7.53 | 47470 | 30.87 |
| 19830-016 | 2 | 20 | 2 | 07/10/10 13:31:42 | 13.03 | 6.94 | 7.55 | 47555 | 30.93 |
| 19830-007 | 2 | 21 | 2 | 07/10/10 13:32:04 | 13.09 | 6.08 | 7.25 | 47328 | 30.76 |
| 19830-015 | 2 | 22 | 2 | 07/10/10 13:32:27 | 13.07 | 6.18 | 7.39 | 47523 | 30.91 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 2 | 23 | 2 | 07/10/10 13:32:45 | 13.06 | 6.66 | 7.60 | 47491 | 30.88 |
| 19830-002 | 2 | 24 | 2 | 07/10/10 13:33:03 | 13.06 | 7.05 | 7.58 | 47426 | 30.83 |
| 19830-012 | 2 | 25 | 2 | 07/10/10 13:33:21 | 13.11 | 6.94 | 7.61 | 47443 | 30.85 |
| 19830-004 | 2 | 26 | 2 | 07/10/10 13:33:36 | 13.27 | 6.75 | 7.51 | 47620 | 30.98 |
| 19830-000 | 2 | 27 | 2 | 07/10/10 13:34:04 | 13.64 | 7.44 | 7.56 | 47615 | 30.99 |
| 19830-003 | 2 | 28 | 2 | 07/10/10 13:34:20 | 13.64 | 7.63 | 7.55 | 47328 | 30.78 |
| 19830-011 | 2 | 29 | 2 | 07/10/10 13:34:39 | 13.71 | 7.27 | 7.67 | 47563 | 30.96 |
| 19830-017 | 2 | 30 | 2 | 07/10/10 13:35:01 | 13.77 | 6.98 | 7.57 | 47525 | 30.93 |
| 19830-014 | 2 | 31 | 2 | 07/10/10 13:35:29 | 13.69 | 6.82 | 7.63 | 47596 | 30.98 |
| 19830-001 | 2 | 32 | 2 | 07/10/10 13:35:50 | 13.64 | 6.70 | 7.44 | 47483 | 30.90 |
| 19830-013 | 2 | 33 | 2 | 07/10/10 13:36:07 | 13.67 | 6.66 | 7.64 | 47608 | 30.99 |
| 19830-010 | 2 | 34 | 2 | 07/10/10 13:36:26 | 13.87 | 6.97 | 7.62 | 47625 | 31.00 |
| 19830-006 | 2 | 35 | 2 | 07/10/10 13:36:57 | 13.08 | 6.89 | 7.29 | 47568 | 30.94 |
| 19830-005 | 2 | 36 | 2 | 07/10/10 13:37:33 | 12.97 | 6.55 | 7.32 | 47458 | 30.85 |
| 19830-013 | 3 | 37 | 2 | 07/10/10 13:37:49 | 12.95 | 6.51 | 7.47 | 47693 | 31.02 |
| 19830-009 | 3 | 38 | 2 | 07/10/10 13:38:08 | 13.03 | 6.43 | 7.52 | 47602 | 30.96 |
| 19830-017 | 3 | 39 | 2 | 07/10/10 13:38:25 | 13.08 | 6.84 | 7.45 | 47462 | 30.86 |
| 19830-016 | 3 | 40 | 2 | 07/10/10 13:38:50 | 13.12 | 6.78 | 7.79 | 47674 | 31.02 |
| 19830-000 | 3 | 41 | 2 | 07/10/10 13:39:10 | 13.22 | 7.41 | 7.68 | 47568 | 30.94 |
| 19830-010 | 3 | 42 | 2 | 07/10/10 13:39:28 | 13.28 | 7.73 | 7.57 | 47565 | 30.94 |
| 19830-008 | 3 | 43 | 2 | 07/10/10 13:39:49 | 13.48 | 7.44 | 7.53 | 47607 | 30.98 |
| 19830-014 | 3 | 44 | 2 | 07/10/10 13:40:04 | 13.52 | 7.17 | 7.57 | 47571 | 30.95 |
| 19830-004 | 3 | 45 | 2 | 07/10/10 13:40:31 | 13.47 | 6.96 | 7.53 | 47616 | 30.99 |
| 19830-006 | 3 | 46 | 2 | 07/10/10 13:40:59 | 13.66 | 6.45 | 7.25 | 47536 | 30.93 |
| 19830-005 | 3 | 47 | 2 | 07/10/10 13:41:21 | 13.69 | 5.96 | 7.20 | 47551 | 30.95 |
| 19830-011 | 3 | 48 | 2 | 07/10/10 13:41:39 | 13.42 | 5.63 | 7.57 | 47801 | 31.12 |
| 19830-002 | 3 | 49 | 2 | 07/10/10 13:41:59 | 13.60 | 6.38 | 7.63 | 47536 | 30.93 |
| 19830-012 | 3 | 50 | 2 | 07/10/10 13:42:17 | 13.79 | 6.74 | 7.68 | 47580 | 30.97 |
| 19830-001 | 3 | 51 | 2 | 07/10/10 13:42:46 | 14.01 | 6.95 | 7.67 | 47655 | 31.03 |
| 19830-003 | 3 | 52 | 2 | 07/10/10 13:43:07 | 14.01 | 7.20 | 7.65 | 47696 | 31.06 |
| 19830-007 | 3 | 53 | 2 | 07/10/10 13:43:37 | 14.00 | 6.45 | 7.23 | 47678 | 31.05 |
| 19830-015 | 3 | 54 | 2 | 07/10/10 13:43:54 | 14.00 | 6.02 | 7.47 | 47716 | 31.07 |
| 19830-006 | 4 | 55 | 2 | 07/10/10 13:44:13 | 13.92 | 6.76 | 7.37 | 47691 | 31.05 |
| 19830-011 | 4 | 56 | 2 | 07/10/10 13:44:34 | 13.81 | 6.83 | 7.67 | 47607 | 30.99 |
| 19830-012 | 4 | 57 | 2 | 07/10/10 13:45:02 | 13.74 | 7.13 | 7.76 | 47723 | 31.07 |
| 19830-010 | 4 | 58 | 2 | 07/10/10 13:45:28 | 13.76 | 7.13 | 7.65 | 47826 | 31.15 |
| 19830-015 | 4 | 59 | 2 | 07/10/10 13:45:48 | 13.69 | 7.01 | 7.56 | 47915 | 31.21 |
| 19830-009 | 4 | 60 | 2 | 07/10/10 13:46:11 | 13.54 | 6.99 | 7.53 | 47876 | 31.18 |
| 19830-001 | 4 | 61 | 2 | 07/10/10 13:46:41 | 13.56 | 6.56 | 7.64 | 47839 | 31.15 |
| 19830-016 | 4 | 62 | 2 | 07/10/10 13:47:05 | 13.58 | 6.51 | 7.68 | 47841 | 31.15 |
| 19830-008 | 4 | 63 | 2 | 07/10/10 13:47:22 | 13.52 | 6.59 | 7.55 | 47752 | 31.09 |
| 19830-004 | 4 | 64 | 2 | 07/10/10 13:47:36 | 13.45 | 6.62 | 7.47 | 47710 | 31.05 |
| 19830-007 | 4 | 65 | 2 | 07/10/10 13:48:03 | 13.61 | 6.36 | 7.25 | 47768 | 31.10 |
| 19830-014 | 4 | 66 | 2 | 07/10/10 13:48:20 | 13.59 | 5.84 | 7.40 | 47741 | 31.08 |
| 19830-000 | 4 | 67 | 2 | 07/10/10 13:48:39 | 13.53 | 6.35 | 7.44 | 47696 | 31.05 |
| 19830-017 | 4 | 68 | 2 | 07/10/10 13:49:03 | 13.49 | 6.35 | 7.56 | 47596 | 30.97 |
| 19830-013 | 4 | 69 | 2 | 07/10/10 13:49:17 | 13.49 | 6.02 | 7.67 | 47685 | 31.04 |
| 19830-002 | 4 | 70 | 2 | 07/10/10 13:49:34 | 13.47 | 6.73 | 7.73 | 47597 | 30.97 |
| 19830-005 | 4 | 71 | 2 | 07/10/10 13:49:52 | 13.44 | 6.88 | 7.46 | 47626 | 30.99 |
| 19830-003 | 4 | 72 | 2 | 07/10/10 13:50:17 | 13.51 | 6.86 | 7.50 | 47660 | 31.02 |
| 19830-016 | 5 | 73 | 2 | 07/10/10 13:50:33 | 13.48 | 6.99 | 7.60 | 47698 | 31.05 |
| 19830-003 | 5 | 74 | 2 | 07/10/10 13:50:49 | 13.45 | 6.73 | 7.49 | 47623 | 30.99 |
| 19830-000 | 5 | 75 | 2 | 07/10/10 13:51:01 | 13.48 | 6.47 | 7.44 | 47666 | 31.02 |
| 19830-013 | 5 | 76 | 2 | 07/10/10 13:51:15 | 13.48 | 6.56 | 7.50 | 47641 | 31.00 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-001 | 5 | 77 | 2 | 07/10/10 13:51:31 | 13.43 | 6.51 | 7.61 | 47552 | 30.94 |
| 19830-002 | 5 | 78 | 2 | 07/10/10 13:51:50 | 13.41 | 6.85 | 7.70 | 47536 | 30.93 |
| 19830-004 | 5 | 79 | 2 | 07/10/10 13:52:12 | 13.39 | 6.75 | 7.49 | 47569 | 30.95 |
| 19830-012 | 5 | 80 | 2 | 07/10/10 13:52:41 | 13.39 | 7.18 | 7.75 | 47606 | 30.98 |
| 19830-005 | 5 | 81 | 2 | 07/10/10 13:53:03 | 13.53 | 7.29 | 7.49 | 47748 | 31.08 |
| 19830-011 | 5 | 82 | 2 | 07/10/10 13:53:27 | 13.46 | 6.17 | 7.43 | 47631 | 31.00 |
| 19830-010 | 5 | 83 | 2 | 07/10/10 13:53:46 | 13.39 | 6.12 | 7.66 | 47694 | 31.04 |
| 19830-017 | 5 | 84 | 2 | 07/10/10 13:54:01 | 13.36 | 6.63 | 7.52 | 47615 | 30.98 |
| 19830-009 | 5 | 85 | 2 | 07/10/10 13:54:19 | 13.32 | 5.85 | 7.49 | 47553 | 30.93 |
| 19830-006 | 5 | 86 | 2 | 07/10/10 13:54:41 | 13.29 | 5.74 | 7.26 | 47626 | 30.99 |
| 19830-008 | 5 | 87 | 2 | 07/10/10 13:54:56 | 13.27 | 5.33 | 7.46 | 47604 | 30.97 |
| 19830-007 | 5 | 88 | 2 | 07/10/10 13:55:14 | 13.27 | 6.62 | 7.46 | 47724 | 31.06 |
| 19830-014 | 5 | 89 | 2 | 07/10/10 13:55:37 | 13.42 | 6.96 | 7.64 | 47742 | 31.07 |
| 19830-015 | 5 | 90 | 2 | 07/10/10 13:55:56 | 13.34 | 7.16 | 7.64 | 47718 | 31.06 |
| 19830-005 | 6 | 91 | 2 | 07/10/10 13:56:14 | 13.28 | 7.31 | 7.53 | 47672 | 31.02 |
| 19830-007 | 6 | 92 | 2 | 07/10/10 13:56:39 | 13.23 | 7.41 | 7.46 | 47683 | 31.03 |
| 19830-002 | 6 | 93 | 2 | 07/10/10 13:57:01 | 13.20 | 7.25 | 7.68 | 47606 | 30.97 |
| 19830-009 | 6 | 94 | 2 | 07/10/10 13:57:28 | 13.17 | 6.89 | 7.52 | 47603 | 30.97 |
| 19830-013 | 6 | 95 | 2 | 07/10/10 13:57:47 | 13.12 | 6.73 | 7.74 | 47513 | 30.90 |
| 19830-004 | 6 | 96 | 2 | 07/10/10 13:58:06 | 13.14 | 7.18 | 7.62 | 47630 | 30.98 |
| 19830-012 | 6 | 97 | 2 | 07/10/10 13:58:47 | 13.72 | 7.30 | 7.69 | 47639 | 31.01 |
| 19830-015 | 6 | 98 | 2 | 07/10/10 13:59:04 | 13.63 | 7.11 | 7.63 | 47786 | 31.11 |
| 19830-014 | 6 | 99 | 2 | 07/10/10 13:59:22 | 13.56 | 6.87 | 7.71 | 47796 | 31.12 |
| 19830-003 | 6 | 100 | 2 | 07/10/10 13:59:45 | 13.56 | 7.15 | 7.58 | 47848 | 31.16 |
| 19830-010 | 6 | 101 | 2 | 07/10/10 13:59:58 | 13.56 | 7.30 | 7.67 | 47948 | 31.23 |
| 19830-000 | 6 | 102 | 2 | 07/10/10 14:00:33 | 13.52 | 7.80 | 7.66 | 47438 | 30.86 |
| 19830-016 | 6 | 103 | 2 | 07/10/10 14:00:52 | 13.54 | 7.64 | 7.78 | 47887 | 31.18 |
| 19830-001 | 6 | 104 | 2 | 07/10/10 14:01:08 | 13.63 | 7.31 | 7.74 | 47897 | 31.19 |
| 19830-017 | 6 | 105 | 2 | 07/10/10 14:01:24 | 13.72 | 7.45 | 7.68 | 47847 | 31.16 |
| 19830-008 | 6 | 106 | 2 | 07/10/10 14:01:41 | 13.70 | 7.28 | 7.70 | 47999 | 31.27 |
| 19830-011 | 6 | 107 | 2 | 07/10/10 14:02:06 | 13.68 | 7.00 | 7.67 | 47784 | 31.11 |
| 19830-006 | 6 | 108 | 2 | 07/10/10 14:02:27 | 13.61 | 6.82 | 7.46 | 47832 | 31.15 |
| 19830-015 | 7 | 109 | 2 | 07/10/10 14:02:43 | 13.53 | 6.85 | 7.64 | 47849 | 31.16 |
| 19830-017 | 7 | 110 | 2 | 07/10/10 14:02:57 | 13.46 | 6.99 | 7.73 | 47504 | 30.90 |
| 19830-003 | 7 | 111 | 2 | 07/10/10 14:03:18 | 13.30 | 7.29 | 7.59 | 47748 | 31.08 |
| 19830-008 | 7 | 112 | 2 | 07/10/10 14:03:39 | 13.15 | 7.47 | 7.73 | 47801 | 31.11 |
| 19830-006 | 7 | 113 | 2 | 07/10/10 14:04:20 | 13.90 | 7.01 | 7.43 | 47495 | 30.91 |
| 19830-012 | 7 | 114 | 2 | 07/10/10 14:04:48 | 13.76 | 7.17 | 7.75 | 47529 | 30.93 |
| 19830-004 | 7 | 115 | 2 | 07/10/10 14:05:08 | 13.71 | 7.42 | 7.67 | 47522 | 30.93 |
| 19830-011 | 7 | 116 | 2 | 07/10/10 14:05:31 | 13.67 | 7.35 | 7.77 | 47503 | 30.91 |
| 19830-014 | 7 | 117 | 2 | 07/10/10 14:05:50 | 13.63 | 7.37 | 7.85 | 47631 | 31.00 |
| 19830-005 | 7 | 118 | 2 | 07/10/10 14:06:08 | 13.62 | 7.45 | 7.51 | 47529 | 30.93 |
| 19830-001 | 7 | 119 | 2 | 07/10/10 14:06:29 | 13.60 | 7.21 | 7.59 | 47458 | 30.88 |
| 19830-000 | 7 | 120 | 2 | 07/10/10 14:07:04 | 13.72 | 7.76 | 7.63 | 45778 | 29.67 |
| 19830-009 | 7 | 121 | 2 | 07/10/10 14:07:24 | 13.47 | 7.68 | 7.59 | 47607 | 30.98 |
| 19830-010 | 7 | 122 | 2 | 07/10/10 14:07:43 | 13.28 | 7.24 | 7.57 | 47680 | 31.03 |
| 19830-007 | 7 | 123 | 2 | 07/10/10 14:08:03 | 13.22 | 7.03 | 7.43 | 47685 | 31.03 |
| 19830-002 | 7 | 124 | 2 | 07/10/10 14:08:24 | 13.19 | 7.12 | 7.54 | 46679 | 30.30 |
| 19830-013 | 7 | 125 | 2 | 07/10/10 14:08:47 | 13.11 | 7.30 | 7.70 | 47773 | 31.09 |
| 19830-016 | 7 | 126 | 2 | 07/10/10 14:09:08 | 13.13 | 7.17 | 7.70 | 47695 | 31.03 |
| 19830-017 | 8 | 127 | 2 | 07/10/10 14:09:25 | 13.09 | 7.01 | 7.68 | 47637 | 30.99 |
| 19830-013 | 8 | 128 | 2 | 07/10/10 14:09:41 | 13.05 | 7.16 | 7.70 | 47520 | 30.90 |
| 19830-010 | 8 | 129 | 2 | 07/10/10 14:10:15 | 13.69 | 7.43 | 7.75 | 47525 | 30.93 |
| 19830-007 | 8 | 130 | 2 | 07/10/10 14:10:35 | 13.65 | 7.42 | 7.52 | 47512 | 30.92 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 8 | 131 | 2 | 07/10/10 14:11:02 | 13.52 | 6.70 | 7.59 | 47534 | 30.93 |
| 19830-002 | 8 | 132 | 2 | 07/10/10 14:11:22 | 13.51 | 6.17 | 7.55 | 47439 | 30.86 |
| 19830-004 | 8 | 133 | 2 | 07/10/10 14:11:37 | 13.44 | 6.33 | 7.57 | 47553 | 30.94 |
| 19830-003 | 8 | 134 | 2 | 07/10/10 14:11:54 | 13.38 | 7.12 | 7.66 | 47556 | 30.94 |
| 19830-005 | 8 | 135 | 2 | 07/10/10 14:12:15 | 13.34 | 7.12 | 7.41 | 47592 | 30.96 |
| 19830-012 | 8 | 136 | 2 | 07/10/10 14:12:35 | 13.33 | 6.88 | 7.60 | 47638 | 31.00 |
| 19830-006 | 8 | 137 | 2 | 07/10/10 14:12:58 | 13.21 | 6.80 | 7.35 | 47737 | 31.06 |
| 19830-001 | 8 | 138 | 2 | 07/10/10 14:13:12 | 13.10 | 6.62 | 7.56 | 47621 | 30.98 |
| 19830-014 | 8 | 139 | 2 | 07/10/10 14:13:22 | 13.02 | 6.95 | 7.70 | 47708 | 31.04 |
| 19830-000 | 8 | 140 | 2 | 07/10/10 14:13:34 | 13.00 | 7.24 | 7.69 | 47740 | 31.06 |
| 19830-009 | 8 | 141 | 2 | 07/10/10 14:13:50 | 12.99 | 7.71 | 7.74 | 47516 | 30.90 |
| 19830-008 | 8 | 142 | 2 | 07/10/10 14:14:14 | 12.98 | 7.77 | 7.87 | 47713 | 31.04 |
| 19830-015 | 8 | 143 | 2 | 07/10/10 14:14:37 | 12.98 | 7.54 | 7.72 | 47498 | 30.88 |
| 19830-016 | 8 | 144 | 2 | 07/10/10 14:14:51 | 13.01 | 7.29 | 7.66 | 47754 | 31.07 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 3 | 07/11/10 12:57:05 | 12.98 | 7.99 | 7.65 | 47712 | 31.04 |
| 19830-016 | 1 | 2 | 3 | 07/11/10 12:57:50 | 12.89 | 7.75 | 7.71 | 45551 | 29.48 |
| 19830-015 | 1 | 3 | 3 | 07/11/10 13:00:31 | 12.89 | 6.68 | 7.48 | 47619 | 30.97 |
| 19830-017 | 1 | 4 | 3 | 07/11/10 13:00:48 | 12.90 | 7.01 | 7.48 | 47504 | 30.89 |
| 19830-001 | 1 | 5 | 3 | 07/11/10 13:01:05 | 12.96 | 6.70 | 7.48 | 47495 | 30.88 |
| 19830-011 | 1 | 6 | 3 | 07/11/10 13:01:29 | 13.03 | 6.79 | 7.68 | 47638 | 30.99 |
| 19830-014 | 1 | 7 | 3 | 07/11/10 13:01:49 | 13.11 | 6.96 | 7.62 | 47722 | 31.05 |
| 19830-009 | 1 | 8 | 3 | 07/11/10 13:02:05 | 13.15 | 6.83 | 7.60 | 47429 | 30.84 |
| 19830-012 | 1 | 9 | 3 | 07/11/10 13:02:28 | 13.29 | 6.71 | 7.65 | 47692 | 31.03 |
| 19830-010 | 1 | 10 | 3 | 07/11/10 13:02:45 | 13.39 | 7.00 | 7.67 | 47775 | 31.10 |
| 19830-008 | 1 | 11 | 3 | 07/11/10 13:03:07 | 13.42 | 7.35 | 7.82 | 47687 | 31.04 |
| 19830-006 | 1 | 12 | 3 | 07/11/10 13:03:41 | 13.49 | 6.25 | 7.35 | 47666 | 31.02 |
| 19830-004 | 1 | 13 | 3 | 07/11/10 13:04:52 | 13.61 | 6.71 | 7.56 | 47468 | 30.88 |
| 19830-013 | 1 | 14 | 3 | 07/11/10 13:05:48 | 13.65 | 6.69 | 7.75 | 47419 | 30.85 |
| 19830-000 | 1 | 15 | 3 | 07/11/10 13:06:27 | 13.66 | 7.79 | 7.60 | 47751 | 31.09 |
| 19830-005 | 1 | 16 | 3 | 07/11/10 13:07:34 | 13.81 | 8.09 | 7.50 | 47796 | 31.13 |
| 19830-007 | 1 | 17 | 3 | 07/11/10 13:08:13 | 13.88 | 7.87 | 7.44 | 47885 | 31.19 |
| 19830-003 | 1 | 18 | 3 | 07/11/10 13:08:40 | 14.10 | 7.59 | 7.53 | 47807 | 31.14 |
| 19830-009 | 2 | 19 | 3 | 07/11/10 13:09:15 | 13.31 | 7.67 | 7.61 | 47554 | 30.94 |
| 19830-016 | 2 | 20 | 3 | 07/11/10 13:09:43 | 13.13 | 6.93 | 7.54 | 47514 | 30.90 |
| 19830-007 | 2 | 21 | 3 | 07/11/10 13:10:07 | 13.26 | 6.53 | 7.32 | 47346 | 30.78 |
| 19830-015 | 2 | 22 | 3 | 07/11/10 13:10:44 | 13.21 | 3.05 | 7.06 | 47558 | 30.94 |
| 19830-008 | 2 | 23 | 3 | 07/11/10 13:11:31 | 13.24 | 6.83 | 7.57 | 47567 | 30.94 |
| 19830-002 | 2 | 24 | 3 | 07/11/10 13:11:59 | 13.33 | 7.20 | 7.62 | 47472 | 30.88 |
| 19830-012 | 2 | 25 | 3 | 07/11/10 13:12:22 | 13.47 | 7.44 | 7.74 | 47379 | 30.81 |
| 19830-004 | 2 | 26 | 3 | 07/11/10 13:13:20 | 13.96 | 6.93 | 7.52 | 47393 | 30.84 |
| 19830-000 | 2 | 27 | 3 | 07/11/10 13:13:46 | 13.95 | 7.77 | 7.62 | 47610 | 31.00 |
| 19830-003 | 2 | 28 | 3 | 07/11/10 13:14:02 | 14.08 | 7.98 | 7.60 | 47456 | 30.89 |
| 19830-011 | 2 | 29 | 3 | 07/11/10 13:14:31 | 14.15 | 7.55 | 7.76 | 47599 | 30.99 |
| 19830-017 | 2 | 30 | 3 | 07/11/10 13:14:51 | 14.12 | 7.52 | 7.66 | 47617 | 31.01 |
| 19830-014 | 2 | 31 | 3 | 07/11/10 13:15:19 | 14.08 | 7.21 | 7.66 | 47647 | 31.03 |
| 19830-001 | 2 | 32 | 3 | 07/11/10 13:15:45 | 14.11 | 7.04 | 7.52 | 47551 | 30.96 |
| 19830-013 | 2 | 33 | 3 | 07/11/10 13:16:12 | 14.03 | 7.43 | 7.81 | 47673 | 31.04 |
| 19830-010 | 2 | 34 | 3 | 07/11/10 13:16:47 | 14.28 | 7.33 | 7.69 | 47584 | 30.99 |
| 19830-006 | 2 | 35 | 3 | 07/11/10 13:17:36 | 13.68 | 7.46 | 7.44 | 47534 | 30.93 |
| 19830-005 | 2 | 36 | 3 | 07/11/10 13:17:56 | 13.66 | 7.43 | 7.43 | 47634 | 31.00 |
| 19830-013 | 3 | 37 | 3 | 07/11/10 13:18:29 | 13.82 | 7.18 | 7.61 | 47686 | 31.05 |
| 19830-009 | 3 | 38 | 3 | 07/11/10 13:18:44 | 13.91 | 7.23 | 7.62 | 47605 | 30.99 |
| 19830-017 | 3 | 39 | 3 | 07/11/10 13:19:26 | 13.92 | 6.86 | 7.55 | 47459 | 30.89 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-016 | 3 | 40 | 3 | 07/11/10 13:19:50 | 13.92 | 7.35 | 7.82 | 47660 | 31.03 |
| 19830-000 | 3 | 41 | 3 | 07/11/10 13:20:24 | 13.99 | 8.26 | 7.69 | 47576 | 30.97 |
| 19830-010 | 3 | 42 | 3 | 07/11/10 13:21:06 | 14.04 | 7.98 | 7.54 | 47530 | 30.94 |
| 19830-008 | 3 | 43 | 3 | 07/11/10 13:21:36 | 13.92 | 7.77 | 7.62 | 47560 | 30.96 |
| 19830-014 | 3 | 44 | 3 | 07/11/10 13:21:59 | 14.19 | 7.64 | 7.66 | 47650 | 31.03 |
| 19830-004 | 3 | 45 | 3 | 07/11/10 13:22:15 | 14.25 | 7.60 | 7.64 | 47639 | 31.03 |
| 19830-006 | 3 | 46 | 3 | 07/11/10 13:22:40 | 14.54 | 7.21 | 7.47 | 47514 | 30.94 |
| 19830-005 | 3 | 47 | 3 | 07/11/10 13:23:03 | 14.68 | 6.73 | 7.42 | 47567 | 30.98 |
| 19830-011 | 3 | 48 | 3 | 07/11/10 13:23:37 | 14.61 | 7.25 | 7.71 | 47779 | 31.14 |
| 19830-002 | 3 | 49 | 3 | 07/11/10 13:24:07 | 14.59 | 7.41 | 7.68 | 47562 | 30.98 |
| 19830-012 | 3 | 50 | 3 | 07/11/10 13:24:34 | 14.96 | 7.49 | 7.73 | 47587 | 31.01 |
| 19830-001 | 3 | 51 | 3 | 07/11/10 13:27:34 | 14.03 | 7.05 | 7.81 | 47757 | 31.10 |
| 19830-003 | 3 | 52 | 3 | 07/11/10 13:27:54 | 14.02 | 7.66 | 7.72 | 47726 | 31.08 |
| 19830-007 | 3 | 53 | 3 | 07/11/10 13:29:07 | 13.98 | 5.64 | 7.31 | 47704 | 31.07 |
| 19830-015 | 3 | 54 | 3 | 07/11/10 13:29:39 | 14.02 | 7.14 | 7.52 | 47770 | 31.11 |
| 19830-006 | 4 | 55 | 3 | 07/11/10 13:30:13 | 13.97 | 6.65 | 7.37 | 47774 | 31.11 |
| 19830-011 | 4 | 56 | 3 | 07/11/10 13:30:32 | 13.87 | 6.85 | 7.76 | 47528 | 30.93 |
| 19830-012 | 4 | 57 | 3 | 07/11/10 13:30:53 | 13.81 | 7.47 | 7.82 | 47806 | 31.13 |
| 19830-010 | 4 | 58 | 3 | 07/11/10 13:31:17 | 13.78 | 7.72 | 7.74 | 47903 | 31.20 |
| 19830-015 | 4 | 59 | 3 | 07/11/10 13:32:00 | 13.73 | 7.22 | 7.55 | 48001 | 31.27 |
| 19830-009 | 4 | 60 | 3 | 07/11/10 13:32:26 | 13.67 | 7.24 | 7.58 | 47956 | 31.24 |
| 19830-001 | 4 | 61 | 3 | 07/11/10 13:33:03 | 13.78 | 6.73 | 7.70 | 46987 | 30.54 |
| 19830-016 | 4 | 62 | 3 | 07/11/10 13:33:21 | 13.81 | 6.80 | 7.72 | 47895 | 31.20 |
| 19830-008 | 4 | 63 | 3 | 07/11/10 13:33:46 | 13.69 | 7.11 | 7.61 | 47840 | 31.15 |
| 19830-004 | 4 | 64 | 3 | 07/11/10 13:34:18 | 13.70 | 6.84 | 7.46 | 47799 | 31.13 |
| 19830-007 | 4 | 65 | 3 | 07/11/10 13:35:08 | 14.15 | 6.54 | 7.37 | 47508 | 30.93 |
| 19830-014 | 4 | 66 | 3 | 07/11/10 13:35:33 | 14.01 | 6.65 | 7.53 | 47768 | 31.11 |
| 19830-000 | 4 | 67 | 3 | 07/11/10 13:35:56 | 13.92 | 7.13 | 7.53 | 47742 | 31.09 |
| 19830-017 | 4 | 68 | 3 | 07/11/10 13:36:17 | 13.95 | 7.16 | 7.66 | 47709 | 31.07 |
| 19830-013 | 4 | 69 | 3 | 07/11/10 13:36:44 | 14.03 | 7.32 | 7.77 | 47724 | 31.08 |
| 19830-002 | 4 | 70 | 3 | 07/11/10 13:37:06 | 13.97 | 7.46 | 7.80 | 47677 | 31.05 |
| 19830-005 | 4 | 71 | 3 | 07/11/10 13:37:31 | 13.91 | 7.34 | 7.53 | 47698 | 31.06 |
| 19830-003 | 4 | 72 | 3 | 07/11/10 13:39:01 | 14.05 | 6.68 | 7.59 | 46517 | 30.21 |
| 19830-016 | 5 | 73 | 3 | 07/11/10 13:39:22 | 13.94 | 7.14 | 7.69 | 47703 | 31.06 |
| 19830-003 | 5 | 74 | 3 | 07/11/10 13:39:51 | 13.90 | 6.97 | 7.52 | 47678 | 31.04 |
| 19830-000 | 5 | 75 | 3 | 07/11/10 13:40:32 | 13.97 | 7.42 | 7.55 | 47652 | 31.03 |
| 19830-013 | 5 | 76 | 3 | 07/11/10 13:41:01 | 13.96 | 7.27 | 7.67 | 47664 | 31.04 |
| 19830-001 | 5 | 77 | 3 | 07/11/10 13:41:29 | 13.97 | 7.44 | 7.73 | 47610 | 31.00 |
| 19830-002 | 5 | 78 | 3 | 07/11/10 13:42:06 | 13.80 | 7.09 | 7.74 | 47615 | 31.00 |
| 19830-004 | 5 | 79 | 3 | 07/11/10 13:42:27 | 13.80 | 7.09 | 7.57 | 47618 | 31.00 |
| 19830-012 | 5 | 80 | 3 | 07/11/10 13:42:56 | 13.80 | 7.68 | 7.85 | 47654 | 31.02 |
| 19830-005 | 5 | 81 | 3 | 07/11/10 13:43:54 | 14.24 | 6.33 | 7.43 | 47712 | 31.08 |
| 19830-011 | 5 | 82 | 3 | 07/11/10 13:44:27 | 14.22 | 6.56 | 7.58 | 47671 | 31.05 |
| 19830-010 | 5 | 83 | 3 | 07/11/10 13:44:58 | 14.20 | 7.31 | 7.77 | 47734 | 31.09 |
| 19830-017 | 5 | 84 | 3 | 07/11/10 13:45:36 | 14.30 | 6.44 | 7.57 | 47630 | 31.02 |
| 19830-009 | 5 | 85 | 3 | 07/11/10 13:45:58 | 14.15 | 6.95 | 7.61 | 47651 | 31.03 |
| 19830-006 | 5 | 86 | 3 | 07/11/10 13:46:38 | 14.24 | 6.10 | 7.36 | 47458 | 30.89 |
| 19830-008 | 5 | 87 | 3 | 07/11/10 13:47:06 | 14.11 | 7.38 | 7.71 | 47667 | 31.04 |
| 19830-007 | 5 | 88 | 3 | 07/11/10 13:47:35 | 14.16 | 7.50 | 7.54 | 47711 | 31.07 |
| 19830-014 | 5 | 89 | 3 | 07/11/10 13:48:22 | 13.85 | 7.60 | 7.79 | 47625 | 31.00 |
| 19830-015 | 5 | 90 | 3 | 07/11/10 13:48:36 | 13.97 | 7.57 | 7.73 | 47814 | 31.14 |
| 19830-005 | 6 | 91 | 3 | 07/11/10 13:48:52 | 14.23 | 7.73 | 7.64 | 47693 | 31.06 |
| 19830-007 | 6 | 92 | 3 | 07/11/10 13:49:11 | 14.17 | 7.74 | 7.55 | 47680 | 31.05 |
| 19830-002 | 6 | 93 | 3 | 07/11/10 13:49:24 | 14.24 | 7.54 | 7.67 | 47697 | 31.07 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 6 | 94 | 3 | 07/11/10 13:49:36 | 14.52 | 7.48 | 7.67 | 47717 | 31.09 |
| 19830-013 | 6 | 95 | 3 | 07/11/10 13:49:52 | 14.47 | 7.54 | 7.78 | 47578 | 30.99 |
| 19830-004 | 6 | 96 | 3 | 07/11/10 13:50:11 | 14.53 | 7.74 | 7.69 | 47639 | 31.03 |
| 19830-012 | 6 | 97 | 3 | 07/11/10 13:56:22 | 14.04 | 7.32 | 7.75 | 47729 | 31.08 |
| 19830-015 | 6 | 98 | 3 | 07/11/10 13:56:40 | 13.97 | 7.42 | 7.65 | 47782 | 31.12 |
| 19830-014 | 6 | 99 | 3 | 07/11/10 13:56:59 | 13.89 | 7.42 | 7.80 | 47829 | 31.15 |
| 19830-003 | 6 | 100 | 3 | 07/11/10 13:57:13 | 13.91 | 7.50 | 7.71 | 47856 | 31.17 |
| 19830-010 | 6 | 101 | 3 | 07/11/10 13:57:35 | 13.87 | 7.80 | 7.77 | 46781 | 30.39 |
| 19830-000 | 6 | 102 | 3 | 07/11/10 13:58:16 | 13.90 | 7.75 | 7.73 | 47651 | 31.02 |
| 19830-016 | 6 | 103 | 3 | 07/11/10 13:58:39 | 13.90 | 7.62 | 7.72 | 47695 | 31.06 |
| 19830-001 | 6 | 104 | 3 | 07/11/10 14:00:17 | 13.89 | 6.81 | 7.86 | 47888 | 31.20 |
| 19830-017 | 6 | 105 | 3 | 07/11/10 14:01:50 | 14.00 | 7.39 | 7.85 | 47455 | 30.88 |
| 19830-008 | 6 | 106 | 3 | 07/11/10 14:02:41 | 13.99 | 7.12 | 7.80 | 47826 | 31.15 |
| 19830-011 | 6 | 107 | 3 | 07/11/10 14:02:52 | 13.97 | 7.17 | 7.77 | 47843 | 31.17 |
| 19830-006 | 6 | 108 | 3 | 07/11/10 14:03:06 | 13.92 | 7.39 | 7.79 | 47794 | 31.13 |
| 19830-015 | 7 | 109 | 3 | 07/11/10 14:03:52 | 13.83 | 6.87 | 7.55 | 47826 | 31.15 |
| 19830-017 | 7 | 110 | 3 | 07/11/10 14:04:11 | 13.68 | 7.36 | 7.66 | 47913 | 31.21 |
| 19830-003 | 7 | 111 | 3 | 07/11/10 14:04:22 | 13.68 | 7.53 | 7.75 | 47646 | 31.01 |
| 19830-008 | 7 | 112 | 3 | 07/11/10 14:04:35 | 13.64 | 7.66 | 7.70 | 47769 | 31.10 |
| 19830-006 | 7 | 113 | 3 | 07/11/10 14:04:55 | 13.46 | 7.90 | 7.82 | 47806 | 31.12 |
| 19830-012 | 7 | 114 | 3 | 07/11/10 14:05:31 | 14.42 | 7.33 | 7.55 | 47541 | 30.96 |
| 19830-004 | 7 | 115 | 3 | 07/11/10 14:05:53 | 14.27 | 7.42 | 7.76 | 47596 | 30.99 |
| 19830-011 | 7 | 116 | 3 | 07/11/10 14:06:08 | 14.26 | 7.54 | 7.76 | 47609 | 31.00 |
| 19830-014 | 7 | 117 | 3 | 07/11/10 14:06:19 | 14.26 | 7.70 | 7.81 | 47581 | 30.98 |
| 19830-005 | 7 | 118 | 3 | 07/11/10 14:06:37 | 14.23 | 7.69 | 7.90 | 47675 | 31.05 |
| 19830-001 | 7 | 119 | 3 | 07/11/10 14:07:20 | 14.24 | 7.20 | 7.53 | 47589 | 30.99 |
| 19830-000 | 7 | 120 | 3 | 07/11/10 14:07:47 | 13.98 | 7.51 | 7.72 | 47576 | 30.97 |
| 19830-009 | 7 | 121 | 3 | 07/11/10 14:08:09 | 14.17 | 7.90 | 7.69 | 47614 | 31.01 |
| 19830-010 | 7 | 122 | 3 | 07/11/10 14:08:43 | 14.05 | 7.45 | 7.68 | 47590 | 30.98 |
| 19830-007 | 7 | 123 | 3 | 07/11/10 14:08:55 | 13.91 | 7.42 | 7.67 | 47672 | 31.04 |
| 19830-002 | 7 | 124 | 3 | 07/11/10 14:09:13 | 13.99 | 7.52 | 7.58 | 47743 | 31.09 |
| 19830-013 | 7 | 125 | 3 | 07/11/10 14:09:30 | 13.93 | 7.51 | 7.67 | 47699 | 31.06 |
| 19830-016 | 7 | 126 | 3 | 07/11/10 14:09:48 | 13.75 | 7.62 | 7.76 | 47739 | 31.08 |
| 19830-017 | 8 | 127 | 3 | 07/11/10 14:10:04 | 13.77 | 7.59 | 7.73 | 47705 | 31.06 |
| 19830-013 | 8 | 128 | 3 | 07/11/10 14:10:20 | 13.75 | 7.33 | 7.68 | 47666 | 31.03 |
| 19830-010 | 8 | 129 | 3 | 07/11/10 14:10:41 | 13.80 | 7.41 | 7.70 | 47620 | 31.00 |
| 19830-007 | 8 | 130 | 3 | 07/11/10 14:11:18 | 14.39 | 7.73 | 7.78 | 47597 | 31.00 |
| 19830-011 | 8 | 131 | 3 | 07/11/10 14:11:33 | 14.58 | 7.59 | 7.65 | 47673 | 31.06 |
| 19830-002 | 8 | 132 | 3 | 07/11/10 14:12:08 | 14.41 | 6.91 | 7.71 | 47616 | 31.01 |
| 19830-004 | 8 | 133 | 3 | 07/11/10 14:12:26 | 14.46 | 6.88 | 7.65 | 47575 | 30.98 |
| 19830-003 | 8 | 134 | 3 | 07/11/10 14:12:42 | 14.53 | 7.02 | 7.68 | 47606 | 31.01 |
| 19830-005 | 8 | 135 | 3 | 07/11/10 14:13:05 | 14.56 | 7.55 | 7.74 | 47629 | 31.03 |
| 19830-012 | 8 | 136 | 3 | 07/11/10 14:13:50 | 14.44 | 6.83 | 7.47 | 47636 | 31.03 |
| 19830-006 | 8 | 137 | 3 | 07/11/10 14:14:15 | 14.27 | 7.23 | 7.73 | 47648 | 31.03 |
| 19830-001 | 8 | 138 | 3 | 07/11/10 14:18:04 | 14.23 | 6.58 | 7.50 | 47708 | 31.07 |
| 19830-014 | 8 | 139 | 3 | 07/11/10 14:18:27 | 14.06 | 7.37 | 7.75 | 47678 | 31.05 |
| 19830-000 | 8 | 140 | 3 | 07/11/10 14:18:43 | 14.11 | 7.51 | 7.77 | 47725 | 31.08 |
| 19830-009 | 8 | 141 | 3 | 07/11/10 14:19:02 | 14.25 | 7.62 | 7.74 | 47675 | 31.05 |
| 19830-008 | 8 | 142 | 3 | 07/11/10 14:19:16 | 14.33 | 7.81 | 7.73 | 47621 | 31.01 |
| 19830-015 | 8 | 143 | 3 | 07/11/10 14:19:37 | 14.04 | 7.91 | 7.87 | 47679 | 31.05 |
| 19830-016 | 8 | 144 | 3 | 07/11/10 14:19:52 | 14.13 | 7.87 | 7.75 | 47719 | 31.08 |
| | | | | 07/11/10 14:20:17 | 14.10 | 7.44 | 7.72 | 47661 | 31.04 |
| 19830-002 | 1 | 1 | 4 | 07/12/10 09:24:48 | 13.21 | 8.23 | 7.76 | 46219 | 29.97 |
| 19830-016 | 1 | 2 | 4 | 07/12/10 09:25:30 | 13.32 | 7.79 | 7.81 | 45609 | 29.53 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-015 | 1 | 3 | 4 | 07/12/10 09:25:55 | 13.35 | 7.61 | 7.60 | 46225 | 29.98 |
| 19830-017 | 1 | 4 | 4 | 07/12/10 09:26:08 | 13.29 | 7.54 | 7.60 | 46154 | 29.92 |
| 19830-001 | 1 | 5 | 4 | 07/12/10 09:26:28 | 13.08 | 7.23 | 7.60 | 46134 | 29.90 |
| 19830-011 | 1 | 6 | 4 | 07/12/10 09:26:45 | 13.17 | 7.01 | 7.68 | 46279 | 30.01 |
| 19830-014 | 1 | 7 | 4 | 07/12/10 09:27:09 | 13.33 | 7.17 | 7.59 | 46288 | 30.02 |
| 19830-009 | 1 | 8 | 4 | 07/12/10 09:27:25 | 13.26 | 7.14 | 7.65 | 46151 | 29.92 |
| 19830-012 | 1 | 9 | 4 | 07/12/10 09:27:40 | 13.20 | 7.25 | 7.73 | 46247 | 29.99 |
| 19830-010 | 1 | 10 | 4 | 07/12/10 09:29:59 | 13.45 | 7.66 | 7.67 | 46233 | 29.99 |
| 19830-008 | 1 | 11 | 4 | 07/12/10 09:30:28 | 13.60 | 7.40 | 7.80 | 46244 | 30.00 |
| 19830-006 | 1 | 12 | 4 | 07/12/10 09:30:54 | 13.65 | 6.94 | 7.53 | 46230 | 29.99 |
| 19830-004 | 1 | 13 | 4 | 07/12/10 09:31:14 | 13.39 | 7.13 | 7.63 | 46199 | 29.96 |
| 19830-013 | 1 | 14 | 4 | 07/12/10 09:31:40 | 13.43 | 7.39 | 7.76 | 46253 | 30.00 |
| 19830-000 | 1 | 15 | 4 | 07/12/10 09:32:05 | 13.44 | 7.71 | 7.68 | 46274 | 30.02 |
| 19830-005 | 1 | 16 | 4 | 07/12/10 09:32:19 | 13.39 | 7.90 | 7.64 | 46315 | 30.04 |
| 19830-007 | 1 | 17 | 4 | 07/12/10 09:32:33 | 13.33 | 7.92 | 7.59 | 46353 | 30.07 |
| 19830-003 | 1 | 18 | 4 | 07/12/10 09:32:54 | 13.41 | 7.85 | 7.63 | 46317 | 30.05 |
| 19830-009 | 2 | 19 | 4 | 07/12/10 09:33:25 | 13.27 | 7.74 | 7.64 | 46192 | 29.95 |
| 19830-016 | 2 | 20 | 4 | 07/12/10 09:33:46 | 13.28 | 7.53 | 7.69 | 46204 | 29.96 |
| 19830-007 | 2 | 21 | 4 | 07/12/10 09:34:14 | 13.63 | 6.07 | 7.26 | 46139 | 29.92 |
| 19830-015 | 2 | 22 | 4 | 07/12/10 09:36:45 | 13.52 | 6.57 | 7.60 | 46149 | 29.93 |
| 19830-008 | 2 | 23 | 4 | 07/12/10 09:37:05 | 13.53 | 6.84 | 7.56 | 46192 | 29.96 |
| 19830-002 | 2 | 24 | 4 | 07/12/10 09:37:22 | 13.61 | 6.87 | 7.68 | 46189 | 29.96 |
| 19830-012 | 2 | 25 | 4 | 07/12/10 09:37:35 | 13.62 | 7.10 | 7.72 | 46127 | 29.92 |
| 19830-004 | 2 | 26 | 4 | 07/12/10 09:37:52 | 13.61 | 7.37 | 7.46 | 46047 | 29.86 |
| 19830-000 | 2 | 27 | 4 | 07/12/10 09:38:17 | 13.31 | 7.87 | 7.64 | 46192 | 29.95 |
| 19830-003 | 2 | 28 | 4 | 07/12/10 09:38:35 | 13.70 | 7.88 | 7.65 | 46190 | 29.96 |
| 19830-011 | 2 | 29 | 4 | 07/12/10 09:38:46 | 13.73 | 7.74 | 7.71 | 46196 | 29.97 |
| 19830-017 | 2 | 30 | 4 | 07/12/10 09:39:03 | 13.78 | 7.55 | 7.67 | 46202 | 29.97 |
| 19830-014 | 2 | 31 | 4 | 07/12/10 09:39:16 | 13.72 | 7.42 | 7.68 | 46195 | 29.97 |
| 19830-001 | 2 | 32 | 4 | 07/12/10 09:39:29 | 13.63 | 7.26 | 7.58 | 46021 | 29.84 |
| 19830-013 | 2 | 33 | 4 | 07/12/10 09:39:42 | 13.51 | 7.23 | 7.73 | 46205 | 29.97 |
| 19830-010 | 2 | 34 | 4 | 07/12/10 09:39:55 | 13.57 | 7.42 | 7.69 | 46245 | 30.00 |
| 19830-006 | 2 | 35 | 4 | 07/12/10 09:40:15 | 13.33 | 7.55 | 7.54 | 46205 | 29.96 |
| 19830-005 | 2 | 36 | 4 | 07/12/10 09:40:39 | 13.47 | 7.24 | 7.48 | 46230 | 29.98 |
| 19830-013 | 3 | 37 | 4 | 07/12/10 09:40:57 | 13.48 | 7.05 | 7.58 | 46247 | 30.00 |
| 19830-009 | 3 | 38 | 4 | 07/12/10 09:41:14 | 13.56 | 7.06 | 7.59 | 46125 | 29.91 |
| 19830-017 | 3 | 39 | 4 | 07/12/10 09:41:31 | 13.61 | 7.33 | 7.59 | 46191 | 29.96 |
| 19830-016 | 3 | 40 | 4 | 07/12/10 09:41:55 | 13.49 | 7.33 | 7.76 | 46222 | 29.98 |
| 19830-000 | 3 | 41 | 4 | 07/12/10 09:42:23 | 13.74 | 8.03 | 7.72 | 46194 | 29.97 |
| 19830-010 | 3 | 42 | 4 | 07/12/10 09:42:47 | 13.62 | 7.96 | 7.64 | 46162 | 29.94 |
| 19830-008 | 3 | 43 | 4 | 07/12/10 09:43:14 | 13.36 | 7.79 | 7.65 | 46191 | 29.95 |
| 19830-014 | 3 | 44 | 4 | 07/12/10 09:43:33 | 13.71 | 7.60 | 7.70 | 46249 | 30.01 |
| 19830-004 | 3 | 45 | 4 | 07/12/10 09:43:49 | 13.63 | 7.52 | 7.66 | 46201 | 29.97 |
| 19830-006 | 3 | 46 | 4 | 07/12/10 09:44:15 | 13.78 | 7.00 | 7.47 | 46179 | 29.96 |
| 19830-005 | 3 | 47 | 4 | 07/12/10 09:44:42 | 13.85 | 6.28 | 7.42 | 46181 | 29.96 |
| 19830-011 | 3 | 48 | 4 | 07/12/10 09:44:59 | 13.35 | 6.36 | 7.63 | 46211 | 29.97 |
| 19830-002 | 3 | 49 | 4 | 07/12/10 09:45:15 | 13.53 | 6.89 | 7.72 | 46260 | 30.01 |
| 19830-012 | 3 | 50 | 4 | 07/12/10 09:45:29 | 13.61 | 7.16 | 7.76 | 46182 | 29.95 |
| 19830-001 | 3 | 51 | 4 | 07/12/10 09:45:49 | 13.12 | 7.60 | 7.75 | 46223 | 29.97 |
| 19830-003 | 3 | 52 | 4 | 07/12/10 09:46:04 | 13.15 | 7.66 | 7.71 | 46320 | 30.04 |
| 19830-007 | 3 | 53 | 4 | 07/12/10 09:46:19 | 13.16 | 7.95 | 7.52 | 46397 | 30.10 |
| 19830-015 | 3 | 54 | 4 | 07/12/10 09:46:48 | 13.34 | 7.46 | 7.57 | 46307 | 30.04 |
| 19830-006 | 4 | 55 | 4 | 07/12/10 09:47:01 | 13.29 | 7.54 | 7.54 | 46290 | 30.02 |
| 19830-011 | 4 | 56 | 4 | 07/12/10 09:47:19 | 13.25 | 7.44 | 7.73 | 46301 | 30.03 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 4 | 57 | 4 | 07/12/10 09:47:38 | 13.25 | 7.61 | 7.79 | 46337 | 30.06 |
| 19830-010 | 4 | 58 | 4 | 07/12/10 09:48:00 | 13.00 | 7.90 | 7.72 | 46345 | 30.05 |
| 19830-015 | 4 | 59 | 4 | 07/12/10 09:48:26 | 12.70 | 7.68 | 7.61 | 46424 | 30.10 |
| 19830-009 | 4 | 60 | 4 | 07/12/10 09:48:45 | 12.61 | 7.60 | 7.64 | 46431 | 30.10 |
| 19830-001 | 4 | 61 | 4 | 07/12/10 09:48:59 | 12.61 | 7.67 | 7.71 | 46425 | 30.10 |
| 19830-016 | 4 | 62 | 4 | 07/12/10 09:49:14 | 12.88 | 7.40 | 7.77 | 46511 | 30.17 |
| 19830-008 | 4 | 63 | 4 | 07/12/10 09:49:30 | 12.88 | 7.40 | 7.69 | 46363 | 30.06 |
| 19830-004 | 4 | 64 | 4 | 07/12/10 09:49:49 | 12.98 | 7.43 | 7.58 | 46374 | 30.07 |
| 19830-007 | 4 | 65 | 4 | 07/12/10 09:50:27 | 13.05 | 7.46 | 7.48 | 46324 | 30.04 |
| 19830-014 | 4 | 66 | 4 | 07/12/10 09:51:53 | 13.26 | 6.98 | 7.63 | 46309 | 30.04 |
| 19830-000 | 4 | 67 | 4 | 07/12/10 09:52:18 | 13.22 | 7.37 | 7.60 | 46292 | 30.02 |
| 19830-017 | 4 | 68 | 4 | 07/12/10 09:52:43 | 13.29 | 7.32 | 7.66 | 46289 | 30.02 |
| 19830-013 | 4 | 69 | 4 | 07/12/10 09:53:00 | 13.40 | 7.26 | 7.74 | 46295 | 30.03 |
| 19830-002 | 4 | 70 | 4 | 07/12/10 09:53:36 | 13.39 | 7.47 | 7.79 | 46249 | 30.00 |
| 19830-005 | 4 | 71 | 4 | 07/12/10 09:53:57 | 13.35 | 7.47 | 7.58 | 46239 | 29.99 |
| 19830-003 | 4 | 72 | 4 | 07/12/10 09:54:11 | 13.21 | 7.50 | 7.62 | 46201 | 29.96 |
| 19830-016 | 5 | 73 | 4 | 07/12/10 09:54:35 | 13.18 | 7.50 | 7.74 | 46295 | 30.02 |
| 19830-003 | 5 | 74 | 4 | 07/12/10 09:55:02 | 13.30 | 7.07 | 7.56 | 46259 | 30.00 |
| 19830-000 | 5 | 75 | 4 | 07/12/10 09:55:18 | 13.46 | 7.05 | 7.60 | 46295 | 30.03 |
| 19830-013 | 5 | 76 | 4 | 07/12/10 09:55:35 | 13.51 | 7.44 | 7.65 | 46260 | 30.01 |
| 19830-001 | 5 | 77 | 4 | 07/12/10 09:55:56 | 13.54 | 7.54 | 7.76 | 46190 | 29.96 |
| 19830-002 | 5 | 78 | 4 | 07/12/10 09:56:08 | 13.50 | 7.67 | 7.76 | 46227 | 29.98 |
| 19830-004 | 5 | 79 | 4 | 07/12/10 09:56:20 | 13.46 | 7.48 | 7.64 | 46181 | 29.95 |
| 19830-012 | 5 | 80 | 4 | 07/12/10 09:56:46 | 13.31 | 7.77 | 7.77 | 46223 | 29.98 |
| 19830-005 | 5 | 81 | 4 | 07/12/10 09:57:25 | 13.06 | 7.65 | 7.54 | 46327 | 30.04 |
| 19830-011 | 5 | 82 | 4 | 07/12/10 09:57:43 | 13.32 | 6.94 | 7.60 | 46313 | 30.04 |
| 19830-010 | 5 | 83 | 4 | 07/12/10 09:57:56 | 13.33 | 6.78 | 7.66 | 46276 | 30.01 |
| 19830-017 | 5 | 84 | 4 | 07/12/10 09:58:16 | 13.51 | 6.72 | 7.60 | 46255 | 30.00 |
| 19830-009 | 5 | 85 | 4 | 07/12/10 09:58:29 | 13.41 | 6.53 | 7.63 | 46179 | 29.95 |
| 19830-006 | 5 | 86 | 4 | 07/12/10 09:58:50 | 13.60 | 6.42 | 7.42 | 46241 | 30.00 |
| 19830-008 | 5 | 87 | 4 | 07/12/10 09:59:16 | 13.57 | 6.94 | 7.69 | 46224 | 29.98 |
| 19830-007 | 5 | 88 | 4 | 07/12/10 09:59:30 | 13.34 | 7.51 | 7.61 | 46149 | 29.92 |
| 19830-014 | 5 | 89 | 4 | 07/12/10 09:59:46 | 13.11 | 7.79 | 7.67 | 46283 | 30.01 |
| 19830-015 | 5 | 90 | 4 | 07/12/10 09:59:58 | 13.14 | 7.75 | 7.69 | 46325 | 30.04 |
| 19830-005 | 6 | 91 | 4 | 07/12/10 10:00:08 | 13.23 | 7.73 | 7.68 | 46349 | 30.06 |
| 19830-007 | 6 | 92 | 4 | 07/12/10 10:00:19 | 13.30 | 7.78 | 7.60 | 46281 | 30.02 |
| 19830-002 | 6 | 93 | 4 | 07/12/10 10:00:30 | 13.33 | 7.74 | 7.67 | 46302 | 30.03 |
| 19830-009 | 6 | 94 | 4 | 07/12/10 10:00:48 | 13.37 | 7.58 | 7.68 | 46258 | 30.00 |
| 19830-013 | 6 | 95 | 4 | 07/12/10 10:01:04 | 13.30 | 7.49 | 7.75 | 46218 | 29.97 |
| 19830-004 | 6 | 96 | 4 | 07/12/10 10:01:16 | 13.18 | 7.65 | 7.72 | 46194 | 29.95 |
| 19830-012 | 6 | 97 | 4 | 07/12/10 10:02:07 | 12.84 | 8.17 | 7.72 | 46367 | 30.06 |
| 19830-015 | 6 | 98 | 4 | 07/12/10 10:02:26 | 12.91 | 7.83 | 7.72 | 46387 | 30.08 |
| 19830-014 | 6 | 99 | 4 | 07/12/10 10:02:47 | 12.78 | 7.64 | 7.77 | 46366 | 30.06 |
| 19830-003 | 6 | 100 | 4 | 07/12/10 10:03:10 | 12.72 | 7.76 | 7.69 | 46373 | 30.06 |
| 19830-010 | 6 | 101 | 4 | 07/12/10 10:03:25 | 12.66 | 7.97 | 7.73 | 46473 | 30.13 |
| 19830-000 | 6 | 102 | 4 | 07/12/10 10:03:39 | 12.76 | 8.14 | 7.72 | 46491 | 30.15 |
| 19830-016 | 6 | 103 | 4 | 07/12/10 10:04:05 | 12.78 | 7.77 | 7.81 | 46427 | 30.10 |
| 19830-001 | 6 | 104 | 4 | 07/12/10 10:04:25 | 12.57 | 7.76 | 7.83 | 46376 | 30.06 |
| 19830-017 | 6 | 105 | 4 | 07/12/10 10:04:41 | 12.44 | 8.08 | 7.78 | 46407 | 30.08 |
| 19830-008 | 6 | 106 | 4 | 07/12/10 10:04:56 | 12.51 | 8.00 | 7.74 | 46433 | 30.10 |
| 19830-011 | 6 | 107 | 4 | 07/12/10 10:05:15 | 12.60 | 7.78 | 7.80 | 46412 | 30.09 |
| 19830-006 | 6 | 108 | 4 | 07/12/10 10:05:31 | 12.65 | 7.60 | 7.61 | 46419 | 30.09 |
| 19830-015 | 7 | 109 | 4 | 07/12/10 10:05:42 | 12.67 | 7.58 | 7.59 | 46449 | 30.12 |
| 19830-017 | 7 | 110 | 4 | 07/12/10 10:05:57 | 12.74 | 7.62 | 7.74 | 46356 | 30.05 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 111 | 4 | 07/12/10 10:06:15 | 12.86 | 7.82 | 7.69 | 46364 | 30.06 |
| 19830-008 | 7 | 112 | 4 | 07/12/10 10:06:35 | 12.76 | 7.99 | 7.78 | 46364 | 30.06 |
| 19830-006 | 7 | 113 | 4 | 07/12/10 10:07:04 | 13.63 | 7.91 | 7.63 | 46265 | 30.02 |
| 19830-012 | 7 | 114 | 4 | 07/12/10 10:07:30 | 13.80 | 7.71 | 7.74 | 46197 | 29.97 |
| 19830-004 | 7 | 115 | 4 | 07/12/10 10:07:49 | 13.83 | 7.77 | 7.73 | 46203 | 29.98 |
| 19830-011 | 7 | 116 | 4 | 07/12/10 10:08:05 | 13.89 | 7.74 | 7.76 | 46182 | 29.96 |
| 19830-014 | 7 | 117 | 4 | 07/12/10 10:08:21 | 13.78 | 7.62 | 7.81 | 46195 | 29.97 |
| 19830-005 | 7 | 118 | 4 | 07/12/10 10:08:34 | 13.72 | 7.82 | 7.68 | 46168 | 29.95 |
| 19830-001 | 7 | 119 | 4 | 07/12/10 10:08:48 | 13.39 | 7.75 | 7.66 | 46074 | 29.87 |
| 19830-000 | 7 | 120 | 4 | 07/12/10 10:09:17 | 13.40 | 8.02 | 7.69 | 46210 | 29.97 |
| 19830-009 | 7 | 121 | 4 | 07/12/10 10:09:38 | 13.03 | 8.08 | 7.71 | 46243 | 29.98 |
| 19830-010 | 7 | 122 | 4 | 07/12/10 10:09:50 | 13.03 | 7.87 | 7.70 | 46346 | 30.05 |
| 19830-007 | 7 | 123 | 4 | 07/12/10 10:10:00 | 13.04 | 7.78 | 7.63 | 46293 | 30.02 |
| 19830-002 | 7 | 124 | 4 | 07/12/10 10:10:13 | 13.03 | 7.64 | 7.65 | 46317 | 30.03 |
| 19830-013 | 7 | 125 | 4 | 07/12/10 10:10:23 | 12.98 | 7.58 | 7.71 | 46324 | 30.04 |
| 19830-016 | 7 | 126 | 4 | 07/12/10 10:10:34 | 13.09 | 7.61 | 7.75 | 46393 | 30.09 |
| 19830-017 | 8 | 127 | 4 | 07/12/10 10:10:50 | 13.21 | 7.50 | 7.70 | 46292 | 30.02 |
| 19830-013 | 8 | 128 | 4 | 07/12/10 10:11:02 | 13.19 | 7.60 | 7.71 | 46191 | 29.95 |
| 19830-010 | 8 | 129 | 4 | 07/12/10 10:11:17 | 13.35 | 7.76 | 7.77 | 46429 | 30.12 |
| 19830-007 | 8 | 130 | 4 | 07/12/10 10:11:33 | 13.72 | 7.83 | 7.62 | 46291 | 30.04 |
| 19830-011 | 8 | 131 | 4 | 07/12/10 10:11:51 | 13.59 | 7.47 | 7.65 | 46210 | 29.97 |
| 19830-002 | 8 | 132 | 4 | 07/12/10 10:12:06 | 13.64 | 6.95 | 7.66 | 46226 | 29.99 |
| 19830-004 | 8 | 133 | 4 | 07/12/10 10:12:27 | 13.78 | 7.10 | 7.67 | 46219 | 29.99 |
| 19830-003 | 8 | 134 | 4 | 07/12/10 10:12:42 | 13.75 | 7.47 | 7.72 | 46206 | 29.98 |
| 19830-005 | 8 | 135 | 4 | 07/12/10 10:13:01 | 13.62 | 7.48 | 7.53 | 46198 | 29.97 |
| 19830-012 | 8 | 136 | 4 | 07/12/10 10:13:16 | 13.35 | 7.29 | 7.68 | 46151 | 29.92 |
| 19830-006 | 8 | 137 | 4 | 07/12/10 10:13:29 | 13.17 | 7.43 | 7.60 | 46208 | 29.96 |
| 19830-001 | 8 | 138 | 4 | 07/12/10 10:13:43 | 13.09 | 7.48 | 7.70 | 46264 | 30.00 |
| 19830-014 | 8 | 139 | 4 | 07/12/10 10:13:58 | 13.19 | 7.69 | 7.77 | 46337 | 30.05 |
| 19830-000 | 8 | 140 | 4 | 07/12/10 10:14:14 | 13.34 | 7.71 | 7.73 | 46306 | 30.04 |
| 19830-009 | 8 | 141 | 4 | 07/12/10 10:14:27 | 13.28 | 8.01 | 7.75 | 46227 | 29.98 |
| 19830-008 | 8 | 142 | 4 | 07/12/10 10:14:41 | 13.16 | 8.05 | 7.83 | 46244 | 29.99 |
| 19830-015 | 8 | 143 | 4 | 07/12/10 10:14:54 | 13.18 | 8.06 | 7.73 | 46302 | 30.03 |
| 19830-016 | 8 | 144 | 4 | 07/12/10 10:15:07 | 13.17 | 7.77 | 7.69 | 46241 | 29.98 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 5 | 07/13/10 09:49:00 | 13.41 | 7.74 | 7.56 | 48579 | 31.68 |
| 19830-016 | 1 | 2 | 5 | 07/13/10 09:50:01 | 13.41 | 7.49 | 7.66 | 47022 | 30.55 |
| 19830-015 | 1 | 3 | 5 | 07/13/10 09:50:26 | 13.37 | 7.40 | 7.39 | 48556 | 31.66 |
| 19830-017 | 1 | 4 | 5 | 07/13/10 09:51:19 | 13.29 | 7.31 | 7.45 | 48530 | 31.64 |
| 19830-001 | 1 | 5 | 5 | 07/13/10 09:52:10 | 13.08 | 7.03 | 7.38 | 48498 | 31.61 |
| 19830-011 | 1 | 6 | 5 | 07/13/10 09:52:48 | 13.12 | 6.97 | 7.54 | 48603 | 31.69 |
| 19830-014 | 1 | 7 | 5 | 07/13/10 09:53:31 | 13.06 | 6.58 | 7.35 | 48616 | 31.70 |
| 19830-009 | 1 | 8 | 5 | 07/13/10 09:54:23 | 12.92 | 6.92 | 7.55 | 48467 | 31.58 |
| 19830-012 | 1 | 9 | 5 | 07/13/10 09:55:41 | 12.82 | 6.39 | 7.57 | 48624 | 31.69 |
| 19830-010 | 1 | 10 | 5 | 07/13/10 09:56:24 | 12.70 | 7.29 | 7.51 | 48645 | 31.70 |
| 19830-008 | 1 | 11 | 5 | 07/13/10 09:57:15 | 12.77 | 6.99 | 7.74 | 48619 | 31.69 |
| 19830-006 | 1 | 12 | 5 | 07/13/10 09:58:06 | 12.79 | 6.79 | 7.40 | 48567 | 31.65 |
| 19830-004 | 1 | 13 | 5 | 07/13/10 09:58:54 | 12.52 | 7.54 | 7.44 | 48620 | 31.68 |
| 19830-013 | 1 | 14 | 5 | 07/13/10 10:00:29 | 12.57 | 6.99 | 7.69 | 48638 | 31.69 |
| 19830-000 | 1 | 15 | 5 | 07/13/10 10:01:18 | 12.58 | 7.98 | 7.52 | 48632 | 31.69 |
| 19830-005 | 1 | 16 | 5 | 07/13/10 10:02:01 | 12.51 | 7.99 | 7.51 | 48695 | 31.73 |
| 19830-007 | 1 | 17 | 5 | 07/13/10 10:02:50 | 12.44 | 7.86 | 7.43 | 48719 | 31.75 |
| 19830-003 | 1 | 18 | 5 | 07/13/10 10:03:43 | 12.54 | 7.89 | 7.51 | 48697 | 31.73 |
| 19830-009 | 2 | 19 | 5 | 07/13/10 10:04:45 | 13.40 | 6.46 | 7.42 | 48567 | 31.67 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-016 | 2 | 20 | 5 | 07/13/10 10:05:22 | 13.38 | 6.66 | 7.36 | 48542 | 31.65 |
| 19830-007 | 2 | 21 | 5 | 07/13/10 10:06:09 | 13.59 | 5.65 | 7.13 | 48246 | 31.45 |
| 19830-015 | 2 | 22 | 5 | 07/13/10 10:07:04 | 13.39 | 7.08 | 7.43 | 48501 | 31.62 |
| 19830-008 | 2 | 23 | 5 | 07/13/10 10:07:51 | 13.30 | 7.14 | 7.53 | 48514 | 31.63 |
| 19830-002 | 2 | 24 | 5 | 07/13/10 10:08:28 | 13.32 | 7.08 | 7.62 | 48493 | 31.62 |
| 19830-012 | 2 | 25 | 5 | 07/13/10 10:08:56 | 13.19 | 7.26 | 7.62 | 48454 | 31.58 |
| 19830-004 | 2 | 26 | 5 | 07/13/10 10:09:55 | 13.05 | 7.46 | 7.49 | 48553 | 31.65 |
| 19830-000 | 2 | 27 | 5 | 07/13/10 10:10:54 | 12.54 | 8.21 | 7.57 | 48597 | 31.66 |
| 19830-003 | 2 | 28 | 5 | 07/13/10 10:12:22 | 12.85 | 7.74 | 7.50 | 48323 | 31.48 |
| 19830-011 | 2 | 29 | 5 | 07/13/10 10:12:54 | 12.81 | 7.64 | 7.71 | 48568 | 31.65 |
| 19830-017 | 2 | 30 | 5 | 07/13/10 10:13:24 | 12.87 | 7.59 | 7.55 | 48480 | 31.59 |
| 19830-014 | 2 | 31 | 5 | 07/13/10 10:14:25 | 12.73 | 6.80 | 7.52 | 48458 | 31.57 |
| 19830-001 | 2 | 32 | 5 | 07/13/10 10:15:02 | 12.66 | 7.12 | 7.47 | 48503 | 31.60 |
| 19830-013 | 2 | 33 | 5 | 07/13/10 10:15:46 | 12.59 | 7.70 | 7.73 | 48658 | 31.71 |
| 19830-010 | 2 | 34 | 5 | 07/13/10 10:16:13 | 12.74 | 7.64 | 7.56 | 48587 | 31.66 |
| 19830-006 | 2 | 35 | 5 | 07/13/10 10:16:54 | 13.20 | 7.39 | 7.40 | 48621 | 31.70 |
| 19830-005 | 2 | 36 | 5 | 07/13/10 10:17:48 | 13.34 | 6.52 | 7.30 | 48559 | 31.66 |
| 19830-013 | 3 | 37 | 5 | 07/13/10 10:18:16 | 13.31 | 6.59 | 7.44 | 48614 | 31.70 |
| 19830-009 | 3 | 38 | 5 | 07/13/10 10:19:01 | 13.39 | 7.51 | 7.55 | 48539 | 31.65 |
| 19830-017 | 3 | 39 | 5 | 07/13/10 10:20:06 | 13.34 | 6.47 | 7.40 | 48507 | 31.63 |
| 19830-016 | 3 | 40 | 5 | 07/13/10 10:20:57 | 13.18 | 7.64 | 7.69 | 48606 | 31.69 |
| 19830-000 | 3 | 41 | 5 | 07/13/10 10:21:44 | 13.30 | 8.16 | 7.62 | 48504 | 31.62 |
| 19830-010 | 3 | 42 | 5 | 07/13/10 10:22:21 | 13.14 | 7.85 | 7.51 | 48496 | 31.61 |
| 19830-008 | 3 | 43 | 5 | 07/13/10 10:22:55 | 12.57 | 7.92 | 7.57 | 48588 | 31.66 |
| 19830-014 | 3 | 44 | 5 | 07/13/10 10:23:43 | 12.97 | 7.32 | 7.61 | 48546 | 31.64 |
| 19830-004 | 3 | 45 | 5 | 07/13/10 10:24:36 | 12.74 | 7.70 | 7.59 | 48589 | 31.66 |
| 19830-006 | 3 | 46 | 5 | 07/13/10 10:25:25 | 12.91 | 6.89 | 7.30 | 48513 | 31.62 |
| 19830-005 | 3 | 47 | 5 | 07/13/10 10:26:42 | 12.98 | 5.95 | 7.21 | 48441 | 31.57 |
| 19830-011 | 3 | 48 | 5 | 07/13/10 10:27:22 | 12.41 | 7.10 | 7.73 | 48897 | 31.87 |
| 19830-002 | 3 | 49 | 5 | 07/13/10 10:27:52 | 12.68 | 7.33 | 7.65 | 48549 | 31.63 |
| 19830-012 | 3 | 50 | 5 | 07/13/10 10:28:24 | 12.79 | 7.22 | 7.72 | 48523 | 31.62 |
| 19830-001 | 3 | 51 | 5 | 07/13/10 10:29:04 | 12.15 | 7.77 | 7.74 | 48721 | 31.73 |
| 19830-003 | 3 | 52 | 5 | 07/13/10 10:29:37 | 12.19 | 7.95 | 7.62 | 48684 | 31.71 |
| 19830-007 | 3 | 53 | 5 | 07/13/10 10:30:39 | 12.24 | 6.51 | 7.24 | 48665 | 31.70 |
| 19830-015 | 3 | 54 | 5 | 07/13/10 10:31:24 | 12.38 | 7.45 | 7.45 | 48657 | 31.70 |
| 19830-006 | 4 | 55 | 5 | 07/13/10 10:32:26 | 12.24 | 6.87 | 7.35 | 48661 | 31.70 |
| 19830-011 | 4 | 56 | 5 | 07/13/10 10:33:05 | 12.18 | 7.43 | 7.74 | 48685 | 31.71 |
| 19830-012 | 4 | 57 | 5 | 07/13/10 10:33:50 | 12.13 | 8.01 | 7.75 | 48716 | 31.73 |
| 19830-010 | 4 | 58 | 5 | 07/13/10 10:34:50 | 11.96 | 7.86 | 7.66 | 48793 | 31.78 |
| 19830-015 | 4 | 59 | 5 | 07/13/10 10:35:38 | 11.65 | 7.62 | 7.49 | 48855 | 31.81 |
| 19830-009 | 4 | 60 | 5 | 07/13/10 10:36:17 | 11.64 | 7.88 | 7.56 | 48866 | 31.82 |
| 19830-001 | 4 | 61 | 5 | 07/13/10 10:37:03 | 11.79 | 7.33 | 7.59 | 48812 | 31.78 |
| 19830-016 | 4 | 62 | 5 | 07/13/10 10:37:43 | 12.20 | 7.12 | 7.68 | 48743 | 31.75 |
| 19830-008 | 4 | 63 | 5 | 07/13/10 10:38:17 | 12.30 | 7.62 | 7.61 | 48745 | 31.76 |
| 19830-004 | 4 | 64 | 5 | 07/13/10 10:38:58 | 12.53 | 7.22 | 7.54 | 48730 | 31.76 |
| 19830-007 | 4 | 65 | 5 | 07/13/10 10:39:57 | 12.26 | 7.05 | 7.31 | 48707 | 31.73 |
| 19830-014 | 4 | 66 | 5 | 07/13/10 10:41:00 | 12.32 | 6.79 | 7.45 | 48725 | 31.75 |
| 19830-000 | 4 | 67 | 5 | 07/13/10 10:41:51 | 12.26 | 7.46 | 7.44 | 48693 | 31.72 |
| 19830-017 | 4 | 68 | 5 | 07/13/10 10:42:33 | 12.33 | 6.89 | 7.59 | 48678 | 31.71 |
| 19830-013 | 4 | 69 | 5 | 07/13/10 10:43:24 | 12.43 | 7.60 | 7.72 | 48662 | 31.70 |
| 19830-002 | 4 | 70 | 5 | 07/13/10 10:44:01 | 12.39 | 7.51 | 7.73 | 48659 | 31.70 |
| 19830-005 | 4 | 71 | 5 | 07/13/10 10:44:41 | 12.32 | 7.58 | 7.45 | 48589 | 31.65 |
| 19830-003 | 4 | 72 | 5 | 07/13/10 10:45:18 | 12.24 | 7.48 | 7.59 | 48633 | 31.68 |
| 19830-016 | 5 | 73 | 5 | 07/13/10 10:45:57 | 12.28 | 7.42 | 7.67 | 48667 | 31.70 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 5 | 74 | 5 | 07/13/10 10:46:38 | 12.40 | 7.05 | 7.49 | 48605 | 31.66 |
| 19830-000 | 5 | 75 | 5 | 07/13/10 10:47:23 | 12.59 | 7.62 | 7.54 | 48569 | 31.64 |
| 19830-013 | 5 | 76 | 5 | 07/13/10 10:48:03 | 12.69 | 7.33 | 7.59 | 48598 | 31.67 |
| 19830-001 | 5 | 77 | 5 | 07/13/10 10:48:46 | 12.80 | 7.71 | 7.66 | 48533 | 31.63 |
| 19830-002 | 5 | 78 | 5 | 07/13/10 10:49:32 | 12.85 | 7.16 | 7.68 | 48565 | 31.65 |
| 19830-004 | 5 | 79 | 5 | 07/13/10 10:50:08 | 12.88 | 7.23 | 7.50 | 48566 | 31.65 |
| 19830-012 | 5 | 80 | 5 | 07/13/10 10:50:46 | 12.93 | 7.72 | 7.68 | 48603 | 31.68 |
| 19830-005 | 5 | 81 | 5 | 07/13/10 10:53:30 | 12.33 | 3.66 | 7.09 | 48645 | 31.69 |
| 19830-011 | 5 | 82 | 5 | 07/13/10 10:54:21 | 12.44 | 3.14 | 7.13 | 48647 | 31.69 |
| 19830-010 | 5 | 83 | 5 | 07/13/10 10:55:49 | 12.40 | 7.12 | 7.66 | 48684 | 31.72 |
| 19830-017 | 5 | 84 | 5 | 07/13/10 10:56:54 | 12.55 | 5.00 | 7.40 | 48529 | 31.61 |
| 19830-009 | 5 | 85 | 5 | 07/13/10 10:57:34 | 12.43 | 5.57 | 7.42 | 48648 | 31.69 |
| 19830-006 | 5 | 86 | 5 | 07/13/10 10:58:25 | 12.63 | 5.49 | 7.18 | 48511 | 31.60 |
| 19830-008 | 5 | 87 | 5 | 07/13/10 10:59:26 | 12.61 | 7.68 | 7.66 | 48634 | 31.69 |
| 19830-007 | 5 | 88 | 5 | 07/13/10 10:59:48 | 12.41 | 7.76 | 7.48 | 48652 | 31.70 |
| 19830-014 | 5 | 89 | 5 | 07/13/10 11:00:29 | 12.27 | 7.62 | 7.60 | 48714 | 31.74 |
| 19830-015 | 5 | 90 | 5 | 07/13/10 11:00:57 | 12.38 | 7.67 | 7.61 | 48699 | 31.73 |
| 19830-005 | 6 | 91 | 5 | 07/13/10 11:01:27 | 12.54 | 7.86 | 7.55 | 48652 | 31.70 |
| 19830-007 | 6 | 92 | 5 | 07/13/10 11:02:07 | 12.69 | 7.56 | 7.41 | 48622 | 31.69 |
| 19830-002 | 6 | 93 | 5 | 07/13/10 11:02:35 | 12.76 | 7.49 | 7.66 | 48657 | 31.71 |
| 19830-009 | 6 | 94 | 5 | 07/13/10 11:03:15 | 12.84 | 6.81 | 7.51 | 48616 | 31.69 |
| 19830-013 | 6 | 95 | 5 | 07/13/10 11:04:01 | 12.80 | 7.61 | 7.75 | 48674 | 31.73 |
| 19830-004 | 6 | 96 | 5 | 07/13/10 11:04:36 | 12.70 | 7.57 | 7.58 | 48694 | 31.74 |
| 19830-012 | 6 | 97 | 5 | 07/13/10 11:05:47 | 12.14 | 7.82 | 7.63 | 48745 | 31.75 |
| 19830-015 | 6 | 98 | 5 | 07/13/10 11:06:29 | 12.05 | 7.58 | 7.62 | 48736 | 31.74 |
| 19830-014 | 6 | 99 | 5 | 07/13/10 11:07:01 | 11.93 | 7.27 | 7.71 | 48553 | 31.60 |
| 19830-003 | 6 | 100 | 5 | 07/13/10 11:07:42 | 11.92 | 7.85 | 7.58 | 48820 | 31.80 |
| 19830-010 | 6 | 101 | 5 | 07/13/10 11:08:39 | 11.87 | 8.09 | 7.65 | 48902 | 31.85 |
| 19830-000 | 6 | 102 | 5 | 07/13/10 11:09:06 | 11.94 | 8.15 | 7.61 | 48846 | 31.82 |
| 19830-016 | 6 | 103 | 5 | 07/13/10 11:09:37 | 11.87 | 7.81 | 7.76 | 48863 | 31.83 |
| 19830-001 | 6 | 104 | 5 | 07/13/10 11:10:06 | 11.74 | 7.86 | 7.75 | 48854 | 31.81 |
| 19830-017 | 6 | 105 | 5 | 07/13/10 11:10:37 | 11.55 | 7.90 | 7.65 | 48878 | 31.82 |
| 19830-008 | 6 | 106 | 5 | 07/13/10 11:11:02 | 11.63 | 7.86 | 7.66 | 48840 | 31.80 |
| 19830-011 | 6 | 107 | 5 | 07/13/10 11:11:48 | 11.86 | 7.44 | 7.74 | 48797 | 31.78 |
| 19830-006 | 6 | 108 | 5 | 07/13/10 11:12:28 | 12.14 | 7.60 | 7.45 | 48798 | 31.79 |
| 19830-015 | 7 | 109 | 5 | 07/13/10 11:12:55 | 12.36 | 7.52 | 7.47 | 48878 | 31.86 |
| 19830-017 | 7 | 110 | 5 | 07/13/10 11:13:34 | 12.63 | 7.51 | 7.70 | 48786 | 31.80 |
| 19830-003 | 7 | 111 | 5 | 07/13/10 11:14:18 | 12.81 | 7.62 | 7.59 | 48799 | 31.82 |
| 19830-008 | 7 | 112 | 5 | 07/13/10 11:14:50 | 12.89 | 7.77 | 7.71 | 48850 | 31.86 |
| 19830-006 | 7 | 113 | 5 | 07/13/10 11:15:42 | 12.79 | 7.52 | 7.50 | 48510 | 31.61 |
| 19830-012 | 7 | 114 | 5 | 07/13/10 11:16:23 | 12.76 | 7.59 | 7.68 | 48551 | 31.64 |
| 19830-004 | 7 | 115 | 5 | 07/13/10 11:16:57 | 12.72 | 7.71 | 7.65 | 48571 | 31.65 |
| 19830-011 | 7 | 116 | 5 | 07/13/10 11:17:39 | 12.73 | 7.15 | 7.72 | 48541 | 31.63 |
| 19830-014 | 7 | 117 | 5 | 07/13/10 11:18:16 | 12.62 | 8.01 | 7.78 | 48651 | 31.70 |
| 19830-005 | 7 | 118 | 5 | 07/13/10 11:19:14 | 12.54 | 7.16 | 7.47 | 48551 | 31.63 |
| 19830-001 | 7 | 119 | 5 | 07/13/10 11:20:05 | 12.20 | 7.87 | 7.63 | 48611 | 31.66 |
| 19830-000 | 7 | 120 | 5 | 07/13/10 11:20:47 | 12.33 | 8.20 | 7.59 | 48548 | 31.62 |
| 19830-009 | 7 | 121 | 5 | 07/13/10 11:21:31 | 12.07 | 7.72 | 7.62 | 48690 | 31.71 |
| 19830-010 | 7 | 122 | 5 | 07/13/10 11:22:21 | 12.14 | 7.65 | 7.61 | 48669 | 31.70 |
| 19830-007 | 7 | 123 | 5 | 07/13/10 11:23:11 | 12.21 | 7.28 | 7.37 | 48716 | 31.73 |
| 19830-002 | 7 | 124 | 5 | 07/13/10 11:24:07 | 12.42 | 7.44 | 7.66 | 48744 | 31.76 |
| 19830-013 | 7 | 125 | 5 | 07/13/10 11:24:37 | 12.50 | 7.60 | 7.66 | 48814 | 31.82 |
| 19830-016 | 7 | 126 | 5 | 07/13/10 11:25:31 | 12.84 | 7.13 | 7.74 | 48668 | 31.73 |
| 19830-017 | 8 | 127 | 5 | 07/13/10 11:26:06 | 13.06 | 7.33 | 7.58 | 48626 | 31.70 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-013 | 8 | 128 | 5 | 07/13/10 11:27:05 | 13.12 | 7.56 | 7.60 | 48619 | 31.70 |
| 19830-010 | 8 | 129 | 5 | 07/13/10 11:28:04 | 12.72 | 8.05 | 7.71 | 48601 | 31.67 |
| 19830-007 | 8 | 130 | 5 | 07/13/10 11:28:37 | 12.83 | 7.74 | 7.45 | 48584 | 31.66 |
| 19830-011 | 8 | 131 | 5 | 07/13/10 11:29:25 | 12.61 | 6.67 | 7.54 | 48645 | 31.70 |
| 19830-002 | 8 | 132 | 5 | 07/13/10 11:29:57 | 12.77 | 6.47 | 7.60 | 48548 | 31.64 |
| 19830-004 | 8 | 133 | 5 | 07/13/10 11:30:39 | 12.84 | 7.64 | 7.58 | 48523 | 31.62 |
| 19830-003 | 8 | 134 | 5 | 07/13/10 11:31:07 | 12.78 | 7.84 | 7.66 | 48588 | 31.66 |
| 19830-005 | 8 | 135 | 5 | 07/13/10 11:31:56 | 12.66 | 6.83 | 7.31 | 48574 | 31.65 |
| 19830-012 | 8 | 136 | 5 | 07/13/10 11:32:31 | 12.42 | 7.19 | 7.62 | 48629 | 31.68 |
| 19830-006 | 8 | 137 | 5 | 07/13/10 11:33:10 | 12.28 | 7.22 | 7.35 | 48650 | 31.69 |
| 19830-001 | 8 | 138 | 5 | 07/13/10 11:33:39 | 12.32 | 7.62 | 7.59 | 48674 | 31.71 |
| 19830-014 | 8 | 139 | 5 | 07/13/10 11:34:22 | 12.50 | 7.55 | 7.76 | 48684 | 31.72 |
| 19830-000 | 8 | 140 | 5 | 07/13/10 11:34:53 | 12.70 | 7.97 | 7.62 | 48640 | 31.70 |
| 19830-009 | 8 | 141 | 5 | 07/13/10 11:35:22 | 12.75 | 7.99 | 7.77 | 48653 | 31.71 |
| 19830-008 | 8 | 142 | 5 | 07/13/10 11:36:08 | 12.71 | 8.10 | 7.83 | 48680 | 31.73 |
| 19830-015 | 8 | 143 | 5 | 07/13/10 11:36:53 | 12.92 | 7.41 | 7.62 | 48642 | 31.71 |
| 19830-016 | 8 | 144 | 5 | 07/13/10 11:37:32 | 13.04 | 7.35 | 7.65 | 48672 | 31.74 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 6 | 07/14/10 09:35:24 | 12.41 | 7.58 | 7.69 | 48914 | 31.89 |
| 19830-016 | 1 | 2 | 6 | 07/14/10 09:36:04 | 12.28 | 7.98 | 7.76 | 48230 | 31.39 |
| 19830-015 | 1 | 3 | 6 | 07/14/10 09:36:18 | 12.24 | 7.92 | 7.56 | 48889 | 31.86 |
| 19830-017 | 1 | 4 | 6 | 07/14/10 09:36:39 | 12.22 | 7.49 | 7.46 | 48860 | 31.84 |
| 19830-001 | 1 | 5 | 6 | 07/14/10 09:36:52 | 12.22 | 7.05 | 7.47 | 48821 | 31.81 |
| 19830-011 | 1 | 6 | 6 | 07/14/10 09:37:09 | 12.20 | 6.95 | 7.46 | 48887 | 31.86 |
| 19830-014 | 1 | 7 | 6 | 07/14/10 09:37:32 | 12.22 | 7.32 | 7.59 | 48919 | 31.88 |
| 19830-009 | 1 | 8 | 6 | 07/14/10 09:37:57 | 12.19 | 6.87 | 7.51 | 48858 | 31.84 |
| 19830-012 | 1 | 9 | 6 | 07/14/10 09:38:20 | 12.23 | 6.25 | 7.64 | 48945 | 31.90 |
| 19830-010 | 1 | 10 | 6 | 07/14/10 09:38:53 | 12.10 | 7.80 | 7.65 | 48947 | 31.90 |
| 19830-008 | 1 | 11 | 6 | 07/14/10 09:39:14 | 12.04 | 8.27 | 7.84 | 48948 | 31.89 |
| 19830-006 | 1 | 12 | 6 | 07/14/10 09:39:40 | 12.03 | 7.49 | 7.45 | 48860 | 31.83 |
| 19830-004 | 1 | 13 | 6 | 07/14/10 09:39:53 | 12.02 | 7.19 | 7.45 | 48931 | 31.88 |
| 19830-013 | 1 | 14 | 6 | 07/14/10 09:40:09 | 12.04 | 7.65 | 7.73 | 48930 | 31.88 |
| 19830-000 | 1 | 15 | 6 | 07/14/10 09:40:25 | 12.02 | 7.97 | 7.67 | 48922 | 31.87 |
| 19830-005 | 1 | 16 | 6 | 07/14/10 09:40:41 | 11.99 | 8.55 | 7.58 | 48965 | 31.90 |
| 19830-007 | 1 | 17 | 6 | 07/14/10 09:40:51 | 11.98 | 8.69 | 7.53 | 48984 | 31.92 |
| 19830-003 | 1 | 18 | 6 | 07/14/10 09:41:05 | 12.04 | 8.64 | 7.54 | 49056 | 31.97 |
| 19830-009 | 2 | 19 | 6 | 07/14/10 09:42:00 | 12.21 | 7.29 | 7.58 | 48824 | 31.81 |
| 19830-016 | 2 | 20 | 6 | 07/14/10 09:42:19 | 12.21 | 7.04 | 7.45 | 48889 | 31.86 |
| 19830-007 | 2 | 21 | 6 | 07/14/10 09:42:57 | 12.22 | 6.14 | 7.20 | 48718 | 31.74 |
| 19830-015 | 2 | 22 | 6 | 07/14/10 09:43:30 | 12.23 | 7.32 | 7.45 | 48076 | 31.27 |
| 19830-008 | 2 | 23 | 6 | 07/14/10 09:43:50 | 12.28 | 7.70 | 7.53 | 48826 | 31.82 |
| 19830-002 | 2 | 24 | 6 | 07/14/10 09:44:03 | 12.28 | 7.62 | 7.60 | 48836 | 31.82 |
| 19830-012 | 2 | 25 | 6 | 07/14/10 09:44:24 | 12.23 | 7.69 | 7.66 | 48545 | 31.61 |
| 19830-004 | 2 | 26 | 6 | 07/14/10 09:44:40 | 12.21 | 7.80 | 7.53 | 48668 | 31.70 |
| 19830-000 | 2 | 27 | 6 | 07/14/10 09:45:10 | 12.07 | 8.61 | 7.58 | 48861 | 31.83 |
| 19830-003 | 2 | 28 | 6 | 07/14/10 09:45:23 | 12.04 | 8.82 | 7.56 | 48820 | 31.80 |
| 19830-011 | 2 | 29 | 6 | 07/14/10 09:45:39 | 12.05 | 8.54 | 7.61 | 48878 | 31.84 |
| 19830-017 | 2 | 30 | 6 | 07/14/10 09:45:57 | 12.05 | 8.15 | 7.56 | 48868 | 31.84 |
| 19830-014 | 2 | 31 | 6 | 07/14/10 09:46:24 | 12.00 | 7.47 | 7.52 | 48925 | 31.88 |
| 19830-001 | 2 | 32 | 6 | 07/14/10 09:46:41 | 11.95 | 7.24 | 7.48 | 48815 | 31.79 |
| 19830-013 | 2 | 33 | 6 | 07/14/10 09:46:56 | 11.95 | 7.29 | 7.57 | 48964 | 31.90 |
| 19830-010 | 2 | 34 | 6 | 07/14/10 09:47:14 | 12.05 | 7.56 | 7.59 | 48905 | 31.86 |
| 19830-006 | 2 | 35 | 6 | 07/14/10 09:47:35 | 12.19 | 8.01 | 7.46 | 48952 | 31.90 |
| 19830-005 | 2 | 36 | 6 | 07/14/10 09:47:58 | 12.20 | 7.70 | 7.35 | 48894 | 31.86 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-013 | 3 | 37 | 6 | 07/14/10 09:48:14 | 12.18 | 7.29 | 7.40 | 48979 | 31.92 |
| 19830-009 | 3 | 38 | 6 | 07/14/10 09:48:42 | 12.27 | 7.58 | 7.56 | 48903 | 31.87 |
| 19830-017 | 3 | 39 | 6 | 07/14/10 09:48:57 | 12.32 | 7.85 | 7.49 | 48851 | 31.84 |
| 19830-016 | 3 | 40 | 6 | 07/14/10 09:49:31 | 12.26 | 8.08 | 7.61 | 48918 | 31.88 |
| 19830-000 | 3 | 41 | 6 | 07/14/10 09:49:59 | 12.25 | 8.79 | 7.65 | 48833 | 31.82 |
| 19830-010 | 3 | 42 | 6 | 07/14/10 09:50:25 | 12.23 | 8.60 | 7.50 | 48787 | 31.79 |
| 19830-008 | 3 | 43 | 6 | 07/14/10 09:50:42 | 12.18 | 8.39 | 7.53 | 48843 | 31.82 |
| 19830-014 | 3 | 44 | 6 | 07/14/10 09:51:00 | 12.15 | 8.24 | 7.62 | 48850 | 31.83 |
| 19830-004 | 3 | 45 | 6 | 07/14/10 09:51:14 | 12.05 | 8.09 | 7.58 | 48893 | 31.86 |
| 19830-006 | 3 | 46 | 6 | 07/14/10 09:51:45 | 12.12 | 7.56 | 7.32 | 48817 | 31.80 |
| 19830-005 | 3 | 47 | 6 | 07/14/10 09:52:09 | 12.09 | 5.33 | 7.12 | 48810 | 31.80 |
| 19830-011 | 3 | 48 | 6 | 07/14/10 09:53:13 | 11.82 | 7.35 | 7.65 | 49099 | 31.99 |
| 19830-002 | 3 | 49 | 6 | 07/14/10 09:53:36 | 12.00 | 7.53 | 7.57 | 48906 | 31.86 |
| 19830-012 | 3 | 50 | 6 | 07/14/10 09:53:50 | 12.07 | 7.61 | 7.64 | 48895 | 31.86 |
| 19830-001 | 3 | 51 | 6 | 07/14/10 09:54:19 | 11.81 | 8.19 | 7.83 | 49012 | 31.93 |
| 19830-003 | 3 | 52 | 6 | 07/14/10 09:54:37 | 11.80 | 8.58 | 7.76 | 48973 | 31.90 |
| 19830-007 | 3 | 53 | 6 | 07/14/10 09:55:19 | 11.84 | 7.41 | 7.33 | 48903 | 31.85 |
| 19830-015 | 3 | 54 | 6 | 07/14/10 09:55:47 | 11.82 | 8.13 | 7.54 | 48959 | 31.89 |
| 19830-006 | 4 | 55 | 6 | 07/14/10 09:56:06 | 11.78 | 8.47 | 7.45 | 48914 | 31.86 |
| 19830-011 | 4 | 56 | 6 | 07/14/10 09:56:25 | 11.71 | 8.37 | 7.75 | 48989 | 31.91 |
| 19830-012 | 4 | 57 | 6 | 07/14/10 09:56:48 | 11.65 | 8.82 | 7.85 | 49049 | 31.95 |
| 19830-010 | 4 | 58 | 6 | 07/14/10 09:57:06 | 11.61 | 9.08 | 7.79 | 49058 | 31.95 |
| 19830-015 | 4 | 59 | 6 | 07/14/10 09:57:19 | 11.53 | 9.05 | 7.67 | 49036 | 31.93 |
| 19830-009 | 4 | 60 | 6 | 07/14/10 09:57:37 | 11.43 | 8.83 | 7.66 | 49110 | 31.98 |
| 19830-001 | 4 | 61 | 6 | 07/14/10 09:57:52 | 11.47 | 8.89 | 7.70 | 49179 | 32.03 |
| 19830-016 | 4 | 62 | 6 | 07/14/10 09:58:08 | 11.63 | 8.48 | 7.68 | 49105 | 31.99 |
| 19830-008 | 4 | 63 | 6 | 07/14/10 09:58:22 | 11.79 | 8.33 | 7.69 | 49070 | 31.97 |
| 19830-004 | 4 | 64 | 6 | 07/14/10 09:58:40 | 11.96 | 8.53 | 7.65 | 49048 | 31.96 |
| 19830-007 | 4 | 65 | 6 | 07/14/10 09:59:03 | 11.80 | 8.42 | 7.44 | 48949 | 31.88 |
| 19830-014 | 4 | 66 | 6 | 07/14/10 09:59:18 | 11.76 | 8.16 | 7.49 | 48989 | 31.91 |
| 19830-000 | 4 | 67 | 6 | 07/14/10 10:00:24 | 11.73 | 8.68 | 7.56 | 48962 | 31.89 |
| 19830-017 | 4 | 68 | 6 | 07/14/10 10:00:37 | 11.72 | 8.64 | 7.60 | 48969 | 31.89 |
| 19830-013 | 4 | 69 | 6 | 07/14/10 10:00:51 | 11.72 | 8.29 | 7.72 | 48986 | 31.91 |
| 19830-002 | 4 | 70 | 6 | 07/14/10 10:01:04 | 11.73 | 8.49 | 7.81 | 48976 | 31.90 |
| 19830-005 | 4 | 71 | 6 | 07/14/10 10:01:20 | 11.75 | 8.53 | 7.58 | 48901 | 31.85 |
| 19830-003 | 4 | 72 | 6 | 07/14/10 10:01:38 | 11.78 | 8.46 | 7.58 | 48938 | 31.87 |
| 19830-016 | 5 | 73 | 6 | 07/14/10 10:02:22 | 11.73 | 8.16 | 7.67 | 48958 | 31.89 |
| 19830-003 | 5 | 74 | 6 | 07/14/10 10:03:11 | 11.73 | 8.07 | 7.54 | 48934 | 31.87 |
| 19830-000 | 5 | 75 | 6 | 07/14/10 10:03:30 | 11.78 | 8.23 | 7.57 | 48902 | 31.85 |
| 19830-013 | 5 | 76 | 6 | 07/14/10 10:03:46 | 11.82 | 8.53 | 7.62 | 48924 | 31.87 |
| 19830-001 | 5 | 77 | 6 | 07/14/10 10:04:12 | 11.87 | 8.65 | 7.65 | 48568 | 31.61 |
| 19830-002 | 5 | 78 | 6 | 07/14/10 10:04:32 | 11.95 | 8.61 | 7.69 | 48911 | 31.86 |
| 19830-004 | 5 | 79 | 6 | 07/14/10 10:04:51 | 12.01 | 8.29 | 7.59 | 48899 | 31.86 |
| 19830-012 | 5 | 80 | 6 | 07/14/10 10:05:36 | 12.10 | 8.90 | 7.81 | 48910 | 31.87 |
| 19830-005 | 5 | 81 | 6 | 07/14/10 10:06:18 | 11.82 | 8.74 | 7.56 | 48953 | 31.89 |
| 19830-011 | 5 | 82 | 6 | 07/14/10 10:06:38 | 11.75 | 8.43 | 7.69 | 48957 | 31.89 |
| 19830-010 | 5 | 83 | 6 | 07/14/10 10:07:07 | 11.71 | 7.73 | 7.66 | 49010 | 31.92 |
| 19830-017 | 5 | 84 | 6 | 07/14/10 10:07:28 | 11.72 | 7.56 | 7.59 | 48954 | 31.88 |
| 19830-009 | 5 | 85 | 6 | 07/14/10 10:07:45 | 11.73 | 7.71 | 7.62 | 49003 | 31.92 |
| 19830-006 | 5 | 86 | 6 | 07/14/10 10:08:02 | 11.77 | 7.86 | 7.53 | 48900 | 31.85 |
| 19830-008 | 5 | 87 | 6 | 07/14/10 10:08:14 | 11.79 | 8.14 | 7.62 | 48978 | 31.90 |
| 19830-007 | 5 | 88 | 6 | 07/14/10 10:08:28 | 11.80 | 8.61 | 7.62 | 48958 | 31.89 |
| 19830-014 | 5 | 89 | 6 | 07/14/10 10:08:41 | 11.75 | 8.78 | 7.67 | 49004 | 31.92 |
| 19830-015 | 5 | 90 | 6 | 07/14/10 10:08:54 | 11.74 | 8.76 | 7.71 | 49006 | 31.92 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-005 | 6 | 91 | 6 | 07/14/10 10:09:08 | 11.75 | 8.71 | 7.65 | 48949 | 31.88 |
| 19830-007 | 6 | 92 | 6 | 07/14/10 10:09:23 | 11.79 | 8.82 | 7.53 | 48930 | 31.87 |
| 19830-002 | 6 | 93 | 6 | 07/14/10 10:09:45 | 11.84 | 8.63 | 7.70 | 48922 | 31.87 |
| 19830-009 | 6 | 94 | 6 | 07/14/10 10:10:03 | 11.86 | 8.49 | 7.67 | 48983 | 31.91 |
| 19830-013 | 6 | 95 | 6 | 07/14/10 10:10:14 | 11.88 | 8.33 | 7.80 | 49034 | 31.95 |
| 19830-004 | 6 | 96 | 6 | 07/14/10 10:10:26 | 11.93 | 8.48 | 7.67 | 49031 | 31.95 |
| 19830-012 | 6 | 97 | 6 | 07/14/10 10:10:51 | 11.80 | 8.76 | 7.70 | 49003 | 31.92 |
| 19830-015 | 6 | 98 | 6 | 07/14/10 10:11:01 | 11.75 | 8.88 | 7.72 | 48970 | 31.90 |
| 19830-014 | 6 | 99 | 6 | 07/14/10 10:11:10 | 11.69 | 8.83 | 7.78 | 48861 | 31.81 |
| 19830-003 | 6 | 100 | 6 | 07/14/10 10:11:19 | 11.65 | 8.71 | 7.79 | 49074 | 31.97 |
| 19830-010 | 6 | 101 | 6 | 07/14/10 10:11:33 | 11.66 | 8.81 | 7.74 | 49166 | 32.03 |
| 19830-000 | 6 | 102 | 6 | 07/14/10 10:11:42 | 11.65 | 8.98 | 7.72 | 49085 | 31.98 |
| 19830-016 | 6 | 103 | 6 | 07/14/10 10:11:52 | 11.64 | 9.12 | 7.75 | 49123 | 32.00 |
| 19830-001 | 6 | 104 | 6 | 07/14/10 10:12:05 | 11.63 | 9.00 | 7.83 | 49120 | 32.00 |
| 19830-017 | 6 | 105 | 6 | 07/14/10 10:12:21 | 11.58 | 8.97 | 7.76 | 49044 | 31.94 |
| 19830-008 | 6 | 106 | 6 | 07/14/10 10:12:33 | 11.56 | 8.99 | 7.77 | 49028 | 31.93 |
| 19830-011 | 6 | 107 | 6 | 07/14/10 10:12:49 | 11.62 | 8.98 | 7.81 | 49048 | 31.95 |
| 19830-006 | 6 | 108 | 6 | 07/14/10 10:13:04 | 11.70 | 8.65 | 7.65 | 49080 | 31.97 |
| 19830-015 | 7 | 109 | 6 | 07/14/10 10:13:14 | 11.81 | 8.56 | 7.59 | 49168 | 32.04 |
| 19830-017 | 7 | 110 | 6 | 07/14/10 10:13:28 | 11.98 | 8.55 | 7.69 | 49147 | 32.04 |
| 19830-003 | 7 | 111 | 6 | 07/14/10 10:13:38 | 12.07 | 8.63 | 7.72 | 49137 | 32.03 |
| 19830-008 | 7 | 112 | 6 | 07/14/10 10:13:57 | 12.20 | 8.87 | 7.79 | 49127 | 32.03 |
| 19830-006 | 7 | 113 | 6 | 07/14/10 10:14:12 | 12.13 | 9.08 | 7.69 | 48790 | 31.78 |
| 19830-012 | 7 | 114 | 6 | 07/14/10 10:14:25 | 12.08 | 8.97 | 7.70 | 48846 | 31.82 |
| 19830-004 | 7 | 115 | 6 | 07/14/10 10:14:39 | 12.05 | 8.90 | 7.75 | 48842 | 31.82 |
| 19830-011 | 7 | 116 | 6 | 07/14/10 10:14:51 | 12.00 | 8.95 | 7.78 | 48831 | 31.81 |
| 19830-014 | 7 | 117 | 6 | 07/14/10 10:15:08 | 11.92 | 8.80 | 7.85 | 48963 | 31.90 |
| 19830-005 | 7 | 118 | 6 | 07/14/10 10:15:18 | 11.91 | 8.96 | 7.74 | 48806 | 31.79 |
| 19830-001 | 7 | 119 | 6 | 07/14/10 10:15:27 | 11.87 | 8.94 | 7.69 | 48855 | 31.82 |
| 19830-000 | 7 | 120 | 6 | 07/14/10 10:15:38 | 11.86 | 8.91 | 7.71 | 48825 | 31.80 |
| 19830-009 | 7 | 121 | 6 | 07/14/10 10:15:51 | 11.73 | 9.18 | 7.74 | 48906 | 31.85 |
| 19830-010 | 7 | 122 | 6 | 07/14/10 10:16:04 | 11.64 | 9.14 | 7.74 | 48945 | 31.87 |
| 19830-007 | 7 | 123 | 6 | 07/14/10 10:16:19 | 11.64 | 8.92 | 7.57 | 48968 | 31.89 |
| 19830-002 | 7 | 124 | 6 | 07/14/10 10:16:35 | 11.72 | 8.60 | 7.73 | 49053 | 31.96 |
| 19830-013 | 7 | 125 | 6 | 07/14/10 10:16:48 | 11.78 | 8.56 | 7.77 | 49102 | 31.99 |
| 19830-016 | 7 | 126 | 6 | 07/14/10 10:16:59 | 11.89 | 8.69 | 7.78 | 49071 | 31.98 |
| 19830-017 | 8 | 127 | 6 | 07/14/10 10:17:09 | 12.02 | 8.64 | 7.73 | 49035 | 31.96 |
| 19830-013 | 8 | 128 | 6 | 07/14/10 10:17:19 | 12.13 | 8.57 | 7.68 | 49057 | 31.98 |
| 19830-010 | 8 | 129 | 6 | 07/14/10 10:17:41 | 12.14 | 8.77 | 7.79 | 48889 | 31.86 |
| 19830-007 | 8 | 130 | 6 | 07/14/10 10:17:55 | 12.10 | 8.99 | 7.64 | 48831 | 31.81 |
| 19830-011 | 8 | 131 | 6 | 07/14/10 10:18:20 | 11.99 | 8.27 | 7.52 | 48742 | 31.74 |
| 19830-002 | 8 | 132 | 6 | 07/14/10 10:18:33 | 12.01 | 7.83 | 7.58 | 48920 | 31.87 |
| 19830-004 | 8 | 133 | 6 | 07/14/10 10:18:47 | 12.04 | 7.59 | 7.64 | 48868 | 31.84 |
| 19830-003 | 8 | 134 | 6 | 07/14/10 10:19:10 | 11.96 | 8.63 | 7.77 | 48885 | 31.85 |
| 19830-005 | 8 | 135 | 6 | 07/14/10 10:19:23 | 11.91 | 8.87 | 7.59 | 48872 | 31.83 |
| 19830-012 | 8 | 136 | 6 | 07/14/10 10:19:38 | 11.85 | 8.55 | 7.65 | 48911 | 31.86 |
| 19830-006 | 8 | 137 | 6 | 07/14/10 10:19:56 | 11.77 | 8.46 | 7.51 | 48925 | 31.86 |
| 19830-001 | 8 | 138 | 6 | 07/14/10 10:20:16 | 11.74 | 8.40 | 7.73 | 48981 | 31.90 |
| 19830-014 | 8 | 139 | 6 | 07/14/10 10:20:30 | 11.76 | 8.64 | 7.82 | 49056 | 31.96 |
| 19830-000 | 8 | 140 | 6 | 07/14/10 10:20:40 | 11.82 | 8.66 | 7.81 | 49016 | 31.93 |
| 19830-009 | 8 | 141 | 6 | 07/14/10 10:20:55 | 11.89 | 8.96 | 7.87 | 49052 | 31.96 |
| 19830-008 | 8 | 142 | 6 | 07/14/10 10:21:16 | 11.99 | 9.06 | 7.94 | 48996 | 31.93 |
| 19830-015 | 8 | 143 | 6 | 07/14/10 10:21:32 | 12.09 | 8.90 | 7.76 | 48990 | 31.93 |
| 19830-016 | 8 | 144 | 6 | 07/14/10 10:21:47 | 12.22 | 8.29 | 7.74 | 49025 | 31.96 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-002 | 1 | 1 | 7 | 07/15/10 10:01:15 | 12.41 | 8.55 | 7.74 | 48900 | 31.88 |
| 19830-016 | 1 | 2 | 7 | 07/15/10 10:02:09 | 12.30 | 8.07 | 7.74 | 47879 | 31.13 |
| 19830-015 | 1 | 3 | 7 | 07/15/10 10:02:22 | 12.25 | 7.93 | 7.59 | 48866 | 31.84 |
| 19830-017 | 1 | 4 | 7 | 07/15/10 10:02:33 | 12.23 | 7.89 | 7.51 | 48821 | 31.81 |
| 19830-001 | 1 | 5 | 7 | 07/15/10 10:02:44 | 12.21 | 7.71 | 7.51 | 48849 | 31.83 |
| 19830-011 | 1 | 6 | 7 | 07/15/10 10:02:57 | 12.21 | 7.39 | 7.56 | 48845 | 31.83 |
| 19830-014 | 1 | 7 | 7 | 07/15/10 10:03:18 | 12.21 | 7.73 | 7.59 | 48902 | 31.87 |
| 19830-009 | 1 | 8 | 7 | 07/15/10 10:03:31 | 12.17 | 7.64 | 7.59 | 48804 | 31.80 |
| 19830-012 | 1 | 9 | 7 | 07/15/10 10:03:43 | 12.19 | 7.40 | 7.63 | 48914 | 31.88 |
| 19830-010 | 1 | 10 | 7 | 07/15/10 10:04:13 | 12.08 | 7.92 | 7.66 | 48914 | 31.87 |
| 19830-008 | 1 | 11 | 7 | 07/15/10 10:04:30 | 12.04 | 8.18 | 7.78 | 48911 | 31.87 |
| 19830-006 | 1 | 12 | 7 | 07/15/10 10:04:41 | 12.04 | 8.00 | 7.65 | 48856 | 31.83 |
| 19830-004 | 1 | 13 | 7 | 07/15/10 10:04:52 | 12.05 | 7.65 | 7.51 | 48879 | 31.84 |
| 19830-013 | 1 | 14 | 7 | 07/15/10 10:05:05 | 12.04 | 7.73 | 7.65 | 48896 | 31.86 |
| 19830-000 | 1 | 15 | 7 | 07/15/10 10:05:16 | 12.01 | 7.90 | 7.64 | 48884 | 31.85 |
| 19830-005 | 1 | 16 | 7 | 07/15/10 10:05:30 | 11.98 | 8.24 | 7.55 | 48955 | 31.90 |
| 19830-007 | 1 | 17 | 7 | 07/15/10 10:05:40 | 11.95 | 8.34 | 7.50 | 49001 | 31.93 |
| 19830-003 | 1 | 18 | 7 | 07/15/10 10:05:51 | 12.00 | 8.29 | 7.50 | 49061 | 31.97 |
| 19830-009 | 2 | 19 | 7 | 07/15/10 10:06:07 | 12.16 | 8.31 | 7.52 | 48933 | 31.89 |
| 19830-016 | 2 | 20 | 7 | 07/15/10 10:06:30 | 12.26 | 6.94 | 7.43 | 48846 | 31.83 |
| 19830-007 | 2 | 21 | 7 | 07/15/10 10:06:43 | 12.28 | 6.08 | 7.33 | 48603 | 31.66 |
| 19830-015 | 2 | 22 | 7 | 07/15/10 10:07:07 | 12.25 | 7.07 | 7.41 | 48664 | 31.70 |
| 19830-008 | 2 | 23 | 7 | 07/15/10 10:07:21 | 12.24 | 7.62 | 7.55 | 48845 | 31.83 |
| 19830-002 | 2 | 24 | 7 | 07/15/10 10:07:40 | 12.24 | 7.77 | 7.63 | 48821 | 31.81 |
| 19830-012 | 2 | 25 | 7 | 07/15/10 10:07:58 | 12.19 | 7.58 | 7.49 | 48105 | 31.29 |
| 19830-004 | 2 | 26 | 7 | 07/15/10 10:08:07 | 12.19 | 7.47 | 7.49 | 48808 | 31.80 |
| 19830-000 | 2 | 27 | 7 | 07/15/10 10:08:31 | 12.06 | 8.14 | 7.55 | 48828 | 31.81 |
| 19830-003 | 2 | 28 | 7 | 07/15/10 10:08:42 | 12.03 | 8.43 | 7.55 | 48590 | 31.63 |
| 19830-011 | 2 | 29 | 7 | 07/15/10 10:08:52 | 12.03 | 8.44 | 7.56 | 48766 | 31.76 |
| 19830-017 | 2 | 30 | 7 | 07/15/10 10:09:02 | 12.04 | 8.22 | 7.56 | 48830 | 31.81 |
| 19830-014 | 2 | 31 | 7 | 07/15/10 10:09:21 | 11.99 | 7.82 | 7.58 | 48886 | 31.85 |
| 19830-001 | 2 | 32 | 7 | 07/15/10 10:09:31 | 11.94 | 7.57 | 7.57 | 48819 | 31.80 |
| 19830-013 | 2 | 33 | 7 | 07/15/10 10:09:41 | 11.92 | 7.50 | 7.62 | 48934 | 31.88 |
| 19830-010 | 2 | 34 | 7 | 07/15/10 10:09:52 | 11.99 | 7.73 | 7.61 | 48922 | 31.87 |
| 19830-006 | 2 | 35 | 7 | 07/15/10 10:10:07 | 12.14 | 7.99 | 7.53 | 48985 | 31.93 |
| 19830-005 | 2 | 36 | 7 | 07/15/10 10:10:21 | 12.21 | 7.97 | 7.43 | 48868 | 31.84 |
| 19830-013 | 3 | 37 | 7 | 07/15/10 10:10:35 | 12.19 | 7.62 | 7.40 | 48910 | 31.87 |
| 19830-009 | 3 | 38 | 7 | 07/15/10 10:10:48 | 12.24 | 7.22 | 7.51 | 48895 | 31.87 |
| 19830-017 | 3 | 39 | 7 | 07/15/10 10:11:04 | 12.30 | 7.63 | 7.49 | 48759 | 31.77 |
| 19830-016 | 3 | 40 | 7 | 07/15/10 10:11:15 | 12.26 | 7.47 | 7.56 | 48853 | 31.84 |
| 19830-000 | 3 | 41 | 7 | 07/15/10 10:11:32 | 12.23 | 7.99 | 7.63 | 48809 | 31.80 |
| 19830-010 | 3 | 42 | 7 | 07/15/10 10:12:14 | 12.21 | 8.19 | 7.49 | 48799 | 31.79 |
| 19830-008 | 3 | 43 | 7 | 07/15/10 10:12:40 | 12.12 | 8.52 | 7.52 | 48878 | 31.85 |
| 19830-014 | 3 | 44 | 7 | 07/15/10 10:12:51 | 12.14 | 8.36 | 7.56 | 48840 | 31.82 |
| 19830-004 | 3 | 45 | 7 | 07/15/10 10:13:03 | 12.05 | 8.13 | 7.58 | 48876 | 31.84 |
| 19830-006 | 3 | 46 | 7 | 07/15/10 10:13:16 | 12.11 | 8.00 | 7.47 | 48841 | 31.82 |
| 19830-005 | 3 | 47 | 7 | 07/15/10 10:13:29 | 12.12 | 7.64 | 7.34 | 48766 | 31.77 |
| 19830-011 | 3 | 48 | 7 | 07/15/10 10:14:16 | 11.77 | 5.30 | 7.43 | 49108 | 32.00 |
| 19830-002 | 3 | 49 | 7 | 07/15/10 10:14:42 | 11.98 | 6.44 | 7.61 | 48865 | 31.83 |
| 19830-012 | 3 | 50 | 7 | 07/15/10 10:14:55 | 12.04 | 7.17 | 7.64 | 48872 | 31.84 |
| 19830-001 | 3 | 51 | 7 | 07/15/10 10:15:20 | 11.77 | 7.85 | 7.74 | 48987 | 31.91 |
| 19830-003 | 3 | 52 | 7 | 07/15/10 10:15:30 | 11.74 | 7.98 | 7.72 | 48983 | 31.91 |
| 19830-007 | 3 | 53 | 7 | 07/15/10 10:15:41 | 11.75 | 8.19 | 7.54 | 48997 | 31.92 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-015 | 3 | 54 | 7 | 07/15/10 10:15:55 | 11.76 | 7.92 | 7.46 | 48968 | 31.90 |
| 19830-006 | 4 | 55 | 7 | 07/15/10 10:16:07 | 11.72 | 8.04 | 7.43 | 48926 | 31.86 |
| 19830-011 | 4 | 56 | 7 | 07/15/10 10:16:18 | 11.66 | 7.94 | 7.55 | 48993 | 31.91 |
| 19830-012 | 4 | 57 | 7 | 07/15/10 10:16:32 | 11.60 | 8.11 | 7.75 | 48999 | 31.91 |
| 19830-010 | 4 | 58 | 7 | 07/15/10 10:16:42 | 11.56 | 8.39 | 7.75 | 48993 | 31.90 |
| 19830-015 | 4 | 59 | 7 | 07/15/10 10:16:52 | 11.45 | 8.58 | 7.65 | 49013 | 31.91 |
| 19830-009 | 4 | 60 | 7 | 07/15/10 10:17:01 | 11.38 | 8.46 | 7.60 | 49031 | 31.92 |
| 19830-001 | 4 | 61 | 7 | 07/15/10 10:17:12 | 11.39 | 8.42 | 7.59 | 49101 | 31.97 |
| 19830-016 | 4 | 62 | 7 | 07/15/10 10:17:28 | 11.56 | 8.09 | 7.54 | 49091 | 31.97 |
| 19830-008 | 4 | 63 | 7 | 07/15/10 10:17:38 | 11.70 | 7.86 | 7.60 | 49089 | 31.98 |
| 19830-004 | 4 | 64 | 7 | 07/15/10 10:17:53 | 11.89 | 8.03 | 7.59 | 49049 | 31.96 |
| 19830-007 | 4 | 65 | 7 | 07/15/10 10:18:05 | 11.80 | 8.06 | 7.51 | 48896 | 31.85 |
| 19830-014 | 4 | 66 | 7 | 07/15/10 10:18:17 | 11.72 | 8.00 | 7.49 | 48978 | 31.90 |
| 19830-000 | 4 | 67 | 7 | 07/15/10 10:18:27 | 11.70 | 7.80 | 7.52 | 48923 | 31.86 |
| 19830-017 | 4 | 68 | 7 | 07/15/10 10:18:37 | 11.68 | 7.84 | 7.49 | 48939 | 31.87 |
| 19830-013 | 4 | 69 | 7 | 07/15/10 10:18:46 | 11.68 | 7.76 | 7.57 | 48959 | 31.89 |
| 19830-002 | 4 | 70 | 7 | 07/15/10 10:18:57 | 11.68 | 7.85 | 7.68 | 48968 | 31.89 |
| 19830-005 | 4 | 71 | 7 | 07/15/10 10:19:09 | 11.70 | 7.98 | 7.55 | 48882 | 31.83 |
| 19830-003 | 4 | 72 | 7 | 07/15/10 10:19:19 | 11.71 | 7.97 | 7.51 | 48926 | 31.86 |
| 19830-016 | 5 | 73 | 7 | 07/15/10 10:19:32 | 11.67 | 8.10 | 7.56 | 48952 | 31.88 |
| 19830-003 | 5 | 74 | 7 | 07/15/10 10:19:44 | 11.68 | 8.06 | 7.52 | 48915 | 31.85 |
| 19830-000 | 5 | 75 | 7 | 07/15/10 10:20:03 | 11.73 | 8.02 | 7.52 | 48892 | 31.84 |
| 19830-013 | 5 | 76 | 7 | 07/15/10 10:20:13 | 11.77 | 8.21 | 7.54 | 48923 | 31.86 |
| 19830-001 | 5 | 77 | 7 | 07/15/10 10:20:30 | 11.84 | 8.21 | 7.53 | 48838 | 31.81 |
| 19830-002 | 5 | 78 | 7 | 07/15/10 10:20:41 | 11.89 | 8.25 | 7.52 | 48961 | 31.90 |
| 19830-004 | 5 | 79 | 7 | 07/15/10 10:20:54 | 11.98 | 8.03 | 7.53 | 48922 | 31.87 |
| 19830-012 | 5 | 80 | 7 | 07/15/10 10:21:11 | 12.06 | 8.05 | 7.67 | 48917 | 31.87 |
| 19830-005 | 5 | 81 | 7 | 07/15/10 10:21:33 | 11.80 | 8.26 | 7.49 | 48890 | 31.84 |
| 19830-011 | 5 | 82 | 7 | 07/15/10 10:21:45 | 11.73 | 7.92 | 7.53 | 48904 | 31.85 |
| 19830-010 | 5 | 83 | 7 | 07/15/10 10:21:57 | 11.67 | 7.89 | 7.55 | 48986 | 31.90 |
| 19830-017 | 5 | 84 | 7 | 07/15/10 10:22:14 | 11.68 | 7.27 | 7.48 | 48847 | 31.80 |
| 19830-009 | 5 | 85 | 7 | 07/15/10 10:22:33 | 11.69 | 7.27 | 7.57 | 48969 | 31.89 |
| 19830-006 | 5 | 86 | 7 | 07/15/10 10:22:58 | 11.74 | 7.71 | 7.39 | 48898 | 31.84 |
| 19830-008 | 5 | 87 | 7 | 07/15/10 10:23:24 | 11.76 | 8.10 | 7.68 | 48945 | 31.88 |
| 19830-007 | 5 | 88 | 7 | 07/15/10 10:23:41 | 11.76 | 8.26 | 7.51 | 48935 | 31.87 |
| 19830-014 | 5 | 89 | 7 | 07/15/10 10:23:55 | 11.71 | 8.14 | 7.53 | 48958 | 31.89 |
| 19830-015 | 5 | 90 | 7 | 07/15/10 10:24:03 | 11.70 | 8.17 | 7.58 | 48967 | 31.89 |
| 19830-005 | 6 | 91 | 7 | 07/15/10 10:24:12 | 11.70 | 8.18 | 7.56 | 48949 | 31.88 |
| 19830-007 | 6 | 92 | 7 | 07/15/10 10:24:23 | 11.74 | 8.22 | 7.48 | 48944 | 31.88 |
| 19830-002 | 6 | 93 | 7 | 07/15/10 10:24:34 | 11.78 | 8.16 | 7.54 | 49014 | 31.93 |
| 19830-009 | 6 | 94 | 7 | 07/15/10 10:24:45 | 11.84 | 8.06 | 7.57 | 48964 | 31.90 |
| 19830-013 | 6 | 95 | 7 | 07/15/10 10:24:57 | 11.88 | 7.93 | 7.67 | 49016 | 31.94 |
| 19830-004 | 6 | 96 | 7 | 07/15/10 10:25:05 | 11.91 | 7.98 | 7.66 | 49053 | 31.96 |
| 19830-012 | 6 | 97 | 7 | 07/15/10 10:25:27 | 11.79 | 8.42 | 7.61 | 48991 | 31.91 |
| 19830-015 | 6 | 98 | 7 | 07/15/10 10:25:39 | 11.71 | 8.46 | 7.62 | 48974 | 31.90 |
| 19830-014 | 6 | 99 | 7 | 07/15/10 10:25:49 | 11.64 | 8.32 | 7.67 | 48819 | 31.78 |
| 19830-003 | 6 | 100 | 7 | 07/15/10 10:26:00 | 11.62 | 8.08 | 7.65 | 49063 | 31.96 |
| 19830-010 | 6 | 101 | 7 | 07/15/10 10:26:11 | 11.62 | 8.17 | 7.64 | 49139 | 32.01 |
| 19830-000 | 6 | 102 | 7 | 07/15/10 10:26:21 | 11.61 | 8.39 | 7.63 | 49046 | 31.95 |
| 19830-016 | 6 | 103 | 7 | 07/15/10 10:26:30 | 11.60 | 8.56 | 7.64 | 49090 | 31.98 |
| 19830-001 | 6 | 104 | 7 | 07/15/10 10:26:38 | 11.59 | 8.55 | 7.69 | 49077 | 31.97 |
| 19830-017 | 6 | 105 | 7 | 07/15/10 10:26:52 | 11.53 | 8.46 | 7.69 | 48991 | 31.90 |
| 19830-008 | 6 | 106 | 7 | 07/15/10 10:27:00 | 11.50 | 8.46 | 7.70 | 49007 | 31.91 |
| 19830-011 | 6 | 107 | 7 | 07/15/10 10:27:11 | 11.55 | 8.49 | 7.67 | 49062 | 31.95 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-006 | 6 | 108 | 7 | 07/15/10 10:27:24 | 11.67 | 8.29 | 7.57 | 49075 | 31.97 |
| 19830-015 | 7 | 109 | 7 | 07/15/10 10:27:38 | 11.83 | 8.17 | 7.53 | 49127 | 32.01 |
| 19830-017 | 7 | 110 | 7 | 07/15/10 10:27:53 | 12.01 | 8.10 | 7.64 | 49084 | 31.99 |
| 19830-003 | 7 | 111 | 7 | 07/15/10 10:28:11 | 12.13 | 8.25 | 7.66 | 49064 | 31.98 |
| 19830-008 | 7 | 112 | 7 | 07/15/10 10:28:40 | 12.25 | 8.50 | 7.72 | 49077 | 32.00 |
| 19830-006 | 7 | 113 | 7 | 07/15/10 10:28:59 | 12.10 | 8.60 | 7.59 | 48614 | 31.66 |
| 19830-012 | 7 | 114 | 7 | 07/15/10 10:29:08 | 12.05 | 8.45 | 7.60 | 48831 | 31.81 |
| 19830-004 | 7 | 115 | 7 | 07/15/10 10:29:15 | 12.03 | 8.39 | 7.64 | 48811 | 31.79 |
| 19830-011 | 7 | 116 | 7 | 07/15/10 10:29:29 | 11.96 | 8.38 | 7.67 | 48806 | 31.79 |
| 19830-014 | 7 | 117 | 7 | 07/15/10 10:29:41 | 11.90 | 8.22 | 7.70 | 48888 | 31.84 |
| 19830-005 | 7 | 118 | 7 | 07/15/10 10:29:51 | 11.86 | 8.29 | 7.64 | 48788 | 31.77 |
| 19830-001 | 7 | 119 | 7 | 07/15/10 10:30:01 | 11.82 | 8.32 | 7.60 | 48838 | 31.80 |
| 19830-000 | 7 | 120 | 7 | 07/15/10 10:30:09 | 11.80 | 8.34 | 7.62 | 48820 | 31.79 |
| 19830-009 | 7 | 121 | 7 | 07/15/10 10:30:22 | 11.69 | 8.53 | 7.65 | 48876 | 31.83 |
| 19830-010 | 7 | 122 | 7 | 07/15/10 10:30:34 | 11.60 | 8.50 | 7.63 | 48931 | 31.86 |
| 19830-007 | 7 | 123 | 7 | 07/15/10 10:30:44 | 11.60 | 8.37 | 7.53 | 48968 | 31.89 |
| 19830-002 | 7 | 124 | 7 | 07/15/10 10:30:53 | 11.67 | 8.19 | 7.55 | 49085 | 31.98 |
| 19830-013 | 7 | 125 | 7 | 07/15/10 10:31:06 | 11.74 | 8.03 | 7.64 | 49129 | 32.01 |
| 19830-016 | 7 | 126 | 7 | 07/15/10 10:31:16 | 11.88 | 8.08 | 7.66 | 49065 | 31.97 |
| 19830-017 | 8 | 127 | 7 | 07/15/10 10:31:26 | 12.02 | 8.01 | 7.63 | 49026 | 31.95 |
| 19830-013 | 8 | 128 | 7 | 07/15/10 10:31:35 | 12.15 | 7.99 | 7.62 | 49008 | 31.94 |
| 19830-010 | 8 | 129 | 7 | 07/15/10 10:31:49 | 12.09 | 8.17 | 7.67 | 48868 | 31.84 |
| 19830-007 | 8 | 130 | 7 | 07/15/10 10:32:04 | 12.03 | 8.41 | 7.57 | 48315 | 31.44 |
| 19830-011 | 8 | 131 | 7 | 07/15/10 10:32:14 | 11.98 | 8.34 | 7.53 | 48848 | 31.82 |
| 19830-002 | 8 | 132 | 7 | 07/15/10 10:32:28 | 11.98 | 7.79 | 7.59 | 48881 | 31.84 |
| 19830-004 | 8 | 133 | 7 | 07/15/10 10:32:40 | 11.99 | 7.37 | 7.57 | 48847 | 31.82 |
| 19830-003 | 8 | 134 | 7 | 07/15/10 10:32:53 | 11.93 | 7.75 | 7.66 | 48815 | 31.79 |
| 19830-005 | 8 | 135 | 7 | 07/15/10 10:33:04 | 11.89 | 8.10 | 7.55 | 48824 | 31.80 |
| 19830-012 | 8 | 136 | 7 | 07/15/10 10:33:13 | 11.84 | 7.95 | 7.56 | 48844 | 31.81 |
| 19830-006 | 8 | 137 | 7 | 07/15/10 10:33:26 | 11.75 | 7.87 | 7.48 | 48914 | 31.86 |
| 19830-001 | 8 | 138 | 7 | 07/15/10 10:33:35 | 11.73 | 7.77 | 7.50 | 48958 | 31.89 |
| 19830-014 | 8 | 139 | 7 | 07/15/10 10:33:54 | 11.77 | 8.09 | 7.74 | 49001 | 31.92 |
| 19830-000 | 8 | 140 | 7 | 07/15/10 10:34:05 | 11.83 | 8.12 | 7.69 | 48972 | 31.90 |
| 19830-009 | 8 | 141 | 7 | 07/15/10 10:34:19 | 11.90 | 8.36 | 7.74 | 49002 | 31.93 |
| 19830-008 | 8 | 142 | 7 | 07/15/10 10:34:35 | 11.98 | 8.44 | 7.81 | 48995 | 31.93 |
| 19830-015 | 8 | 143 | 7 | 07/15/10 10:34:50 | 12.08 | 8.41 | 7.70 | 48967 | 31.91 |
| 19830-016 | 8 | 144 | 7 | 07/15/10 10:35:02 | 12.21 | 8.10 | 7.63 | 48992 | 31.93 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 8 | 07/16/10 09:51:43 | 14.48 | 7.98 | 7.75 | 48377 | 31.57 |
| 19830-016 | 1 | 2 | 8 | 07/16/10 09:53:02 | 14.57 | 7.78 | 7.74 | 48209 | 31.45 |
| 19830-015 | 1 | 3 | 8 | 07/16/10 09:53:31 | 14.60 | 7.83 | 7.69 | 48360 | 31.56 |
| 19830-017 | 1 | 4 | 8 | 07/16/10 09:53:43 | 14.56 | 7.82 | 7.68 | 48361 | 31.56 |
| 19830-001 | 1 | 5 | 8 | 07/16/10 09:53:57 | 14.36 | 7.81 | 7.67 | 48319 | 31.52 |
| 19830-011 | 1 | 6 | 8 | 07/16/10 09:54:15 | 14.51 | 7.73 | 7.69 | 48423 | 31.60 |
| 19830-014 | 1 | 7 | 8 | 07/16/10 09:54:38 | 14.42 | 7.96 | 7.70 | 48525 | 31.67 |
| 19830-009 | 1 | 8 | 8 | 07/16/10 09:54:51 | 14.40 | 7.90 | 7.69 | 48402 | 31.58 |
| 19830-012 | 1 | 9 | 8 | 07/16/10 09:55:47 | 13.24 | 8.23 | 7.49 | 49485 | 32.33 |
| 19830-010 | 1 | 10 | 8 | 07/16/10 09:56:33 | 14.31 | 7.72 | 7.69 | 48385 | 31.57 |
| 19830-008 | 1 | 11 | 8 | 07/16/10 09:56:49 | 14.35 | 7.59 | 7.72 | 48440 | 31.61 |
| 19830-006 | 1 | 12 | 8 | 07/16/10 09:57:07 | 14.54 | 7.63 | 7.68 | 48419 | 31.60 |
| 19830-004 | 1 | 13 | 8 | 07/16/10 09:57:29 | 14.17 | 7.74 | 7.66 | 48372 | 31.55 |
| 19830-013 | 1 | 14 | 8 | 07/16/10 09:57:52 | 14.27 | 7.69 | 7.70 | 48414 | 31.59 |
| 19830-000 | 1 | 15 | 8 | 07/16/10 09:58:19 | 14.30 | 7.84 | 7.68 | 48396 | 31.58 |
| 19830-005 | 1 | 16 | 8 | 07/16/10 09:58:41 | 14.33 | 7.87 | 7.69 | 48385 | 31.57 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-007 | 1 | 17 | 8 | 07/16/10 09:58:56 | 14.27 | 7.78 | 7.66 | 48383 | 31.57 |
| 19830-003 | 1 | 18 | 8 | 07/16/10 09:59:12 | 14.19 | 7.63 | 7.67 | 48374 | 31.56 |
| 19830-009 | 2 | 19 | 8 | 07/16/10 09:59:48 | 14.55 | 7.76 | 7.72 | 48354 | 31.55 |
| 19830-016 | 2 | 20 | 8 | 07/16/10 10:00:13 | 14.47 | 7.69 | 7.64 | 48535 | 31.68 |
| 19830-007 | 2 | 21 | 8 | 07/16/10 10:00:33 | 14.75 | 7.51 | 7.62 | 48355 | 31.56 |
| 19830-015 | 2 | 22 | 8 | 07/16/10 10:00:52 | 14.63 | 7.50 | 7.66 | 48221 | 31.46 |
| 19830-008 | 2 | 23 | 8 | 07/16/10 10:01:15 | 14.44 | 7.68 | 7.70 | 48394 | 31.58 |
| 19830-002 | 2 | 24 | 8 | 07/16/10 10:01:29 | 14.54 | 7.52 | 7.72 | 48432 | 31.61 |
| 19830-012 | 2 | 25 | 8 | 07/16/10 10:01:49 | 14.61 | 7.59 | 7.72 | 48274 | 31.50 |
| 19830-004 | 2 | 26 | 8 | 07/16/10 10:02:02 | 14.56 | 7.55 | 7.71 | 48332 | 31.54 |
| 19830-000 | 2 | 27 | 8 | 07/16/10 10:02:26 | 14.11 | 7.83 | 7.68 | 48357 | 31.54 |
| 19830-003 | 2 | 28 | 8 | 07/16/10 10:02:43 | 14.41 | 7.73 | 7.69 | 48354 | 31.55 |
| 19830-011 | 2 | 29 | 8 | 07/16/10 10:02:58 | 14.47 | 7.63 | 7.70 | 48331 | 31.53 |
| 19830-017 | 2 | 30 | 8 | 07/16/10 10:03:11 | 14.48 | 7.69 | 7.69 | 48354 | 31.55 |
| 19830-014 | 2 | 31 | 8 | 07/16/10 10:03:24 | 14.42 | 7.68 | 7.69 | 48348 | 31.54 |
| 19830-001 | 2 | 32 | 8 | 07/16/10 10:03:41 | 14.34 | 7.63 | 7.70 | 48354 | 31.55 |
| 19830-013 | 2 | 33 | 8 | 07/16/10 10:03:57 | 14.23 | 7.61 | 7.73 | 48289 | 31.50 |
| 19830-010 | 2 | 34 | 8 | 07/16/10 10:04:20 | 14.31 | 7.87 | 7.70 | 48440 | 31.61 |
| 19830-006 | 2 | 35 | 8 | 07/16/10 10:04:54 | 14.45 | 7.71 | 7.67 | 48353 | 31.55 |
| 19830-005 | 2 | 36 | 8 | 07/16/10 10:05:23 | 14.64 | 7.62 | 7.68 | 48341 | 31.54 |
| 19830-013 | 3 | 37 | 8 | 07/16/10 10:05:44 | 14.60 | 7.50 | 7.69 | 48345 | 31.55 |
| 19830-009 | 3 | 38 | 8 | 07/16/10 10:06:07 | 14.63 | 7.60 | 7.71 | 48325 | 31.53 |
| 19830-017 | 3 | 39 | 8 | 07/16/10 10:06:32 | 14.63 | 7.46 | 7.63 | 48332 | 31.54 |
| 19830-016 | 3 | 40 | 8 | 07/16/10 10:06:51 | 14.50 | 7.45 | 7.67 | 48337 | 31.54 |
| 19830-000 | 3 | 41 | 8 | 07/16/10 10:07:21 | 14.79 | 7.83 | 7.73 | 48322 | 31.53 |
| 19830-010 | 3 | 42 | 8 | 07/16/10 10:07:58 | 14.63 | 7.76 | 7.71 | 48308 | 31.52 |
| 19830-008 | 3 | 43 | 8 | 07/16/10 10:08:18 | 14.01 | 7.89 | 7.66 | 48329 | 31.52 |
| 19830-014 | 3 | 44 | 8 | 07/16/10 10:08:33 | 14.31 | 7.64 | 7.69 | 48518 | 31.66 |
| 19830-004 | 3 | 45 | 8 | 07/16/10 10:08:46 | 14.38 | 7.66 | 7.70 | 48352 | 31.55 |
| 19830-006 | 3 | 46 | 8 | 07/16/10 10:09:01 | 14.51 | 7.63 | 7.68 | 48383 | 31.57 |
| 19830-005 | 3 | 47 | 8 | 07/16/10 10:09:18 | 14.57 | 7.59 | 7.67 | 48342 | 31.54 |
| 19830-011 | 3 | 48 | 8 | 07/16/10 10:09:36 | 14.32 | 7.62 | 7.69 | 48341 | 31.54 |
| 19830-002 | 3 | 49 | 8 | 07/16/10 10:10:00 | 14.32 | 7.53 | 7.70 | 48368 | 31.56 |
| 19830-012 | 3 | 50 | 8 | 07/16/10 10:10:18 | 14.35 | 7.52 | 7.71 | 48366 | 31.56 |
| 19830-001 | 3 | 51 | 8 | 07/16/10 10:10:39 | 13.81 | 7.75 | 7.72 | 48341 | 31.52 |
| 19830-003 | 3 | 52 | 8 | 07/16/10 10:10:52 | 13.80 | 7.66 | 7.72 | 48444 | 31.60 |
| 19830-007 | 3 | 53 | 8 | 07/16/10 10:11:15 | 13.92 | 7.54 | 7.60 | 48438 | 31.60 |
| 19830-015 | 3 | 54 | 8 | 07/16/10 10:11:34 | 14.12 | 7.36 | 7.64 | 48420 | 31.59 |
| 19830-006 | 4 | 55 | 8 | 07/16/10 10:11:49 | 14.08 | 7.57 | 7.66 | 48375 | 31.55 |
| 19830-011 | 4 | 56 | 8 | 07/16/10 10:12:03 | 13.96 | 7.60 | 7.69 | 48389 | 31.56 |
| 19830-012 | 4 | 57 | 8 | 07/16/10 10:12:15 | 13.95 | 7.59 | 7.72 | 48394 | 31.56 |
| 19830-010 | 4 | 58 | 8 | 07/16/10 10:12:31 | 13.86 | 7.74 | 7.73 | 48338 | 31.52 |
| 19830-015 | 4 | 59 | 8 | 07/16/10 10:12:45 | 13.67 | 7.82 | 7.69 | 48384 | 31.55 |
| 19830-009 | 4 | 60 | 8 | 07/16/10 10:13:01 | 13.54 | 7.64 | 7.69 | 48420 | 31.57 |
| 19830-001 | 4 | 61 | 8 | 07/16/10 10:13:16 | 13.50 | 7.71 | 7.67 | 48464 | 31.60 |
| 19830-016 | 4 | 62 | 8 | 07/16/10 10:13:36 | 13.83 | 7.55 | 7.68 | 48463 | 31.61 |
| 19830-008 | 4 | 63 | 8 | 07/16/10 10:13:50 | 13.75 | 7.62 | 7.69 | 48400 | 31.56 |
| 19830-004 | 4 | 64 | 8 | 07/16/10 10:14:11 | 13.92 | 7.66 | 7.68 | 48455 | 31.61 |
| 19830-007 | 4 | 65 | 8 | 07/16/10 10:14:43 | 14.05 | 7.55 | 7.66 | 48397 | 31.57 |
| 19830-014 | 4 | 66 | 8 | 07/16/10 10:14:57 | 14.05 | 7.47 | 7.66 | 48387 | 31.56 |
| 19830-000 | 4 | 67 | 8 | 07/16/10 10:15:12 | 14.01 | 7.47 | 7.66 | 48401 | 31.57 |
| 19830-017 | 4 | 68 | 8 | 07/16/10 10:15:27 | 14.12 | 7.65 | 7.67 | 48476 | 31.63 |
| 19830-013 | 4 | 69 | 8 | 07/16/10 10:15:45 | 14.31 | 7.62 | 7.70 | 48387 | 31.57 |
| 19830-002 | 4 | 70 | 8 | 07/16/10 10:16:01 | 14.21 | 7.65 | 7.72 | 48346 | 31.54 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-005 | 4 | 71 | 8 | 07/16/10 10:16:13 | 14.17 | 7.52 | 7.69 | 48349 | 31.54 |
| 19830-003 | 4 | 72 | 8 | 07/16/10 10:16:33 | 13.97 | 7.64 | 7.67 | 48371 | 31.55 |
| 19830-016 | 5 | 73 | 8 | 07/16/10 10:16:50 | 13.99 | 7.69 | 7.68 | 48397 | 31.57 |
| 19830-003 | 5 | 74 | 8 | 07/16/10 10:17:03 | 13.95 | 7.58 | 7.68 | 48440 | 31.60 |
| 19830-000 | 5 | 75 | 8 | 07/16/10 10:17:25 | 14.26 | 7.69 | 7.68 | 48415 | 31.59 |
| 19830-013 | 5 | 76 | 8 | 07/16/10 10:17:42 | 14.31 | 7.70 | 7.67 | 48350 | 31.54 |
| 19830-001 | 5 | 77 | 8 | 07/16/10 10:17:53 | 14.29 | 7.57 | 7.67 | 48320 | 31.52 |
| 19830-002 | 5 | 78 | 8 | 07/16/10 10:18:07 | 14.24 | 7.58 | 7.69 | 48343 | 31.54 |
| 19830-004 | 5 | 79 | 8 | 07/16/10 10:18:21 | 14.23 | 7.47 | 7.68 | 48355 | 31.54 |
| 19830-012 | 5 | 80 | 8 | 07/16/10 10:18:35 | 14.21 | 7.43 | 7.71 | 48322 | 31.52 |
| 19830-005 | 5 | 81 | 8 | 07/16/10 10:19:05 | 14.00 | 7.88 | 7.69 | 47830 | 31.16 |
| 19830-011 | 5 | 82 | 8 | 07/16/10 10:19:25 | 14.22 | 7.64 | 7.71 | 48337 | 31.53 |
| 19830-010 | 5 | 83 | 8 | 07/16/10 10:19:41 | 14.18 | 7.55 | 7.69 | 48342 | 31.53 |
| 19830-017 | 5 | 84 | 8 | 07/16/10 10:20:04 | 14.36 | 7.23 | 7.64 | 48188 | 31.43 |
| 19830-009 | 5 | 85 | 8 | 07/16/10 10:20:27 | 14.06 | 7.34 | 7.64 | 48377 | 31.56 |
| 19830-006 | 5 | 86 | 8 | 07/16/10 10:20:46 | 14.36 | 7.40 | 7.64 | 48411 | 31.59 |
| 19830-008 | 5 | 87 | 8 | 07/16/10 10:21:02 | 14.38 | 7.44 | 7.68 | 48332 | 31.53 |
| 19830-007 | 5 | 88 | 8 | 07/16/10 10:21:21 | 14.18 | 7.59 | 7.64 | 48318 | 31.52 |
| 19830-014 | 5 | 89 | 8 | 07/16/10 10:21:40 | 14.04 | 7.62 | 7.68 | 48393 | 31.57 |
| 19830-015 | 5 | 90 | 8 | 07/16/10 10:21:56 | 14.06 | 7.61 | 7.69 | 48415 | 31.58 |
| 19830-005 | 6 | 91 | 8 | 07/16/10 10:22:44 | 14.19 | 7.44 | 7.68 | 48379 | 31.56 |
| 19830-007 | 6 | 92 | 8 | 07/16/10 10:22:58 | 14.23 | 7.55 | 7.66 | 48385 | 31.57 |
| 19830-002 | 6 | 93 | 8 | 07/16/10 10:23:13 | 14.29 | 7.45 | 7.69 | 48363 | 31.55 |
| 19830-009 | 6 | 94 | 8 | 07/16/10 10:23:34 | 14.21 | 7.61 | 7.70 | 48409 | 31.58 |
| 19830-013 | 6 | 95 | 8 | 07/16/10 10:23:49 | 14.18 | 7.70 | 7.73 | 48366 | 31.55 |
| 19830-004 | 6 | 96 | 8 | 07/16/10 10:24:07 | 14.10 | 7.67 | 7.72 | 48367 | 31.55 |
| 19830-012 | 6 | 97 | 8 | 07/16/10 10:24:34 | 13.63 | 7.86 | 7.70 | 48405 | 31.56 |
| 19830-015 | 6 | 98 | 8 | 07/16/10 10:24:52 | 13.77 | 7.74 | 7.70 | 48435 | 31.59 |
| 19830-014 | 6 | 99 | 8 | 07/16/10 10:25:14 | 13.59 | 7.54 | 7.72 | 48369 | 31.54 |
| 19830-003 | 6 | 100 | 8 | 07/16/10 10:25:26 | 13.54 | 7.47 | 7.70 | 48394 | 31.55 |
| 19830-010 | 6 | 101 | 8 | 07/16/10 10:25:46 | 13.48 | 7.77 | 7.70 | 48470 | 31.60 |
| 19830-000 | 6 | 102 | 8 | 07/16/10 10:26:02 | 13.63 | 7.87 | 7.70 | 48509 | 31.64 |
| 19830-016 | 6 | 103 | 8 | 07/16/10 10:26:18 | 13.58 | 7.80 | 7.72 | 48450 | 31.59 |
| 19830-001 | 6 | 104 | 8 | 07/16/10 10:26:37 | 13.42 | 7.66 | 7.74 | 48419 | 31.57 |
| 19830-017 | 6 | 105 | 8 | 07/16/10 10:26:51 | 13.29 | 7.74 | 7.73 | 48448 | 31.58 |
| 19830-008 | 6 | 106 | 8 | 07/16/10 10:27:06 | 13.32 | 7.81 | 7.72 | 48487 | 31.61 |
| 19830-011 | 6 | 107 | 8 | 07/16/10 10:27:18 | 13.31 | 7.81 | 7.71 | 48490 | 31.61 |
| 19830-006 | 6 | 108 | 8 | 07/16/10 10:27:31 | 13.36 | 7.72 | 7.67 | 48569 | 31.67 |
| 19830-015 | 7 | 109 | 8 | 07/16/10 10:27:48 | 13.46 | 7.63 | 7.64 | 48553 | 31.66 |
| 19830-017 | 7 | 110 | 8 | 07/16/10 10:28:04 | 13.58 | 7.57 | 7.68 | 48549 | 31.67 |
| 19830-003 | 7 | 111 | 8 | 07/16/10 10:28:20 | 13.78 | 7.61 | 7.69 | 48489 | 31.63 |
| 19830-008 | 7 | 112 | 8 | 07/16/10 10:28:40 | 13.80 | 7.72 | 7.72 | 48504 | 31.64 |
| 19830-006 | 7 | 113 | 8 | 07/16/10 10:29:02 | 14.13 | 7.81 | 7.71 | 48483 | 31.63 |
| 19830-012 | 7 | 114 | 8 | 07/16/10 10:29:20 | 14.27 | 7.69 | 7.73 | 48349 | 31.54 |
| 19830-004 | 7 | 115 | 8 | 07/16/10 10:29:34 | 14.28 | 7.77 | 7.74 | 48360 | 31.55 |
| 19830-011 | 7 | 116 | 8 | 07/16/10 10:29:48 | 14.39 | 7.81 | 7.74 | 48388 | 31.57 |
| 19830-014 | 7 | 117 | 8 | 07/16/10 10:30:01 | 14.37 | 7.67 | 7.73 | 48313 | 31.52 |
| 19830-005 | 7 | 118 | 8 | 07/16/10 10:30:14 | 14.31 | 7.78 | 7.70 | 48342 | 31.54 |
| 19830-001 | 7 | 119 | 8 | 07/16/10 10:30:32 | 13.88 | 7.79 | 7.70 | 48280 | 31.48 |
| 19830-000 | 7 | 120 | 8 | 07/16/10 10:30:53 | 14.09 | 7.89 | 7.71 | 48396 | 31.57 |
| 19830-009 | 7 | 121 | 8 | 07/16/10 10:31:11 | 13.82 | 8.03 | 7.70 | 48306 | 31.50 |
| 19830-010 | 7 | 122 | 8 | 07/16/10 10:31:26 | 13.83 | 7.78 | 7.69 | 48464 | 31.61 |
| 19830-007 | 7 | 123 | 8 | 07/16/10 10:31:38 | 13.86 | 7.72 | 7.66 | 48390 | 31.56 |
| 19830-002 | 7 | 124 | 8 | 07/16/10 10:31:50 | 13.89 | 7.64 | 7.67 | 48433 | 31.59 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-013 | 7 | 125 | 8 | 07/16/10 10:32:05 | 13.79 | 7.61 | 7.72 | 48439 | 31.59 |
| 19830-016 | 7 | 126 | 8 | 07/16/10 10:32:21 | 13.96 | 7.70 | 7.71 | 48489 | 31.63 |
| 19830-017 | 8 | 127 | 8 | 07/16/10 10:32:36 | 14.13 | 7.57 | 7.69 | 48444 | 31.61 |
| 19830-013 | 8 | 128 | 8 | 07/16/10 10:32:49 | 14.16 | 7.57 | 7.69 | 48364 | 31.55 |
| 19830-010 | 8 | 129 | 8 | 07/16/10 10:33:14 | 14.10 | 7.81 | 7.72 | 48405 | 31.58 |
| 19830-007 | 8 | 130 | 8 | 07/16/10 10:33:30 | 14.35 | 7.84 | 7.68 | 48427 | 31.60 |
| 19830-011 | 8 | 131 | 8 | 07/16/10 10:33:42 | 14.13 | 7.81 | 7.66 | 48224 | 31.45 |
| 19830-002 | 8 | 132 | 8 | 07/16/10 10:33:56 | 14.15 | 7.49 | 7.68 | 48409 | 31.58 |
| 19830-004 | 8 | 133 | 8 | 07/16/10 10:34:10 | 14.32 | 7.39 | 7.68 | 48431 | 31.60 |
| 19830-003 | 8 | 134 | 8 | 07/16/10 10:34:26 | 14.33 | 7.58 | 7.71 | 48354 | 31.55 |
| 19830-005 | 8 | 135 | 8 | 07/16/10 10:34:41 | 14.28 | 7.65 | 7.65 | 48347 | 31.54 |
| 19830-012 | 8 | 136 | 8 | 07/16/10 10:34:54 | 14.12 | 7.44 | 7.69 | 48246 | 31.46 |
| 19830-006 | 8 | 137 | 8 | 07/16/10 10:35:07 | 13.86 | 7.85 | 7.70 | 48356 | 31.53 |
| 19830-001 | 8 | 138 | 8 | 07/16/10 10:35:20 | 13.79 | 7.71 | 7.70 | 48383 | 31.55 |
| 19830-014 | 8 | 139 | 8 | 07/16/10 10:35:28 | 13.83 | 7.72 | 7.73 | 48591 | 31.70 |
| 19830-000 | 8 | 140 | 8 | 07/16/10 10:35:35 | 13.97 | 7.69 | 7.75 | 48587 | 31.70 |
| 19830-009 | 8 | 141 | 8 | 07/16/10 10:35:44 | 14.05 | 7.80 | 7.75 | 48402 | 31.57 |
| 19830-008 | 8 | 142 | 8 | 07/16/10 10:35:52 | 14.02 | 7.90 | 7.76 | 48406 | 31.57 |
| 19830-015 | 8 | 143 | 8 | 07/16/10 10:36:05 | 14.03 | 7.94 | 7.79 | 48420 | 31.59 |
| 19830-016 | 8 | 144 | 8 | 07/16/10 10:36:15 | 14.06 | 7.76 | 7.74 | 48412 | 31.58 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 9 | 07/17/10 10:59:06 | 12.42 | 8.12 | 7.63 | 48466 | 31.56 |
| 19830-016 | 1 | 2 | 9 | 07/17/10 10:59:42 | 12.35 | 7.94 | 7.65 | 46215 | 29.94 |
| 19830-015 | 1 | 3 | 9 | 07/17/10 11:00:07 | 12.26 | 7.62 | 7.44 | 48403 | 31.51 |
| 19830-017 | 1 | 4 | 9 | 07/17/10 11:00:25 | 12.25 | 7.46 | 7.47 | 48398 | 31.51 |
| 19830-001 | 1 | 5 | 9 | 07/17/10 11:00:40 | 12.24 | 7.29 | 7.52 | 48409 | 31.51 |
| 19830-011 | 1 | 6 | 9 | 07/17/10 11:01:06 | 12.21 | 7.03 | 7.46 | 48414 | 31.52 |
| 19830-014 | 1 | 7 | 9 | 07/17/10 11:01:19 | 12.20 | 6.85 | 7.46 | 48468 | 31.55 |
| 19830-009 | 1 | 8 | 9 | 07/17/10 11:01:32 | 12.19 | 6.79 | 7.48 | 48385 | 31.49 |
| 19830-012 | 1 | 9 | 9 | 07/17/10 11:01:50 | 12.22 | 6.41 | 7.57 | 48491 | 31.57 |
| 19830-010 | 1 | 10 | 9 | 07/17/10 11:02:33 | 12.07 | 6.97 | 7.53 | 48447 | 31.53 |
| 19830-008 | 1 | 11 | 9 | 07/17/10 11:02:50 | 12.03 | 7.15 | 7.69 | 48457 | 31.54 |
| 19830-006 | 1 | 12 | 9 | 07/17/10 11:03:06 | 12.01 | 7.32 | 7.57 | 48393 | 31.49 |
| 19830-004 | 1 | 13 | 9 | 07/17/10 11:03:26 | 12.01 | 7.27 | 7.48 | 48459 | 31.54 |
| 19830-013 | 1 | 14 | 9 | 07/17/10 11:03:40 | 12.02 | 7.38 | 7.54 | 48457 | 31.54 |
| 19830-000 | 1 | 15 | 9 | 07/17/10 11:03:54 | 12.00 | 7.29 | 7.55 | 48420 | 31.51 |
| 19830-005 | 1 | 16 | 9 | 07/17/10 11:04:15 | 11.95 | 7.74 | 7.54 | 48505 | 31.57 |
| 19830-007 | 1 | 17 | 9 | 07/17/10 11:04:30 | 11.92 | 7.88 | 7.50 | 48543 | 31.60 |
| 19830-003 | 1 | 18 | 9 | 07/17/10 11:04:46 | 12.01 | 7.90 | 7.51 | 48580 | 31.63 |
| 19830-009 | 2 | 19 | 9 | 07/17/10 11:05:26 | 12.27 | 7.47 | 7.55 | 48376 | 31.49 |
| 19830-016 | 2 | 20 | 9 | 07/17/10 11:05:43 | 12.28 | 7.04 | 7.40 | 48347 | 31.47 |
| 19830-007 | 2 | 21 | 9 | 07/17/10 11:06:03 | 12.33 | 5.91 | 7.28 | 48020 | 31.24 |
| 19830-015 | 2 | 22 | 9 | 07/17/10 11:06:46 | 12.31 | 7.35 | 7.47 | 48295 | 31.43 |
| 19830-008 | 2 | 23 | 9 | 07/17/10 11:07:05 | 12.31 | 7.53 | 7.64 | 48355 | 31.48 |
| 19830-002 | 2 | 24 | 9 | 07/17/10 11:07:20 | 12.26 | 7.59 | 7.69 | 48385 | 31.50 |
| 19830-012 | 2 | 25 | 9 | 07/17/10 11:07:42 | 12.18 | 7.45 | 7.62 | 48027 | 31.23 |
| 19830-004 | 2 | 26 | 9 | 07/17/10 11:08:00 | 12.18 | 7.46 | 7.51 | 48144 | 31.32 |
| 19830-000 | 2 | 27 | 9 | 07/17/10 11:08:32 | 12.06 | 7.96 | 7.57 | 48369 | 31.48 |
| 19830-003 | 2 | 28 | 9 | 07/17/10 11:08:45 | 12.04 | 8.10 | 7.55 | 48019 | 31.22 |
| 19830-011 | 2 | 29 | 9 | 07/17/10 11:09:15 | 12.04 | 7.61 | 7.49 | 48390 | 31.49 |
| 19830-017 | 2 | 30 | 9 | 07/17/10 11:09:29 | 12.06 | 7.49 | 7.47 | 48372 | 31.48 |
| 19830-014 | 2 | 31 | 9 | 07/17/10 11:09:47 | 12.02 | 7.40 | 7.55 | 48418 | 31.51 |
| 19830-001 | 2 | 32 | 9 | 07/17/10 11:10:02 | 11.96 | 7.14 | 7.57 | 48390 | 31.49 |
| 19830-013 | 2 | 33 | 9 | 07/17/10 11:10:13 | 11.95 | 7.08 | 7.60 | 48500 | 31.57 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2 | 34 | 9 | 07/17/10 11:10:33 | 12.02 | 7.43 | 7.56 | 48432 | 31.52 |
| 19830-006 | 2 | 35 | 9 | 07/17/10 11:10:54 | 12.19 | 7.51 | 7.48 | 48479 | 31.56 |
| 19830-005 | 2 | 36 | 9 | 07/17/10 11:11:07 | 12.20 | 7.41 | 7.45 | 48455 | 31.54 |
| 19830-013 | 3 | 37 | 9 | 07/17/10 11:11:57 | 12.21 | 6.04 | 7.42 | 48473 | 31.56 |
| 19830-009 | 3 | 38 | 9 | 07/17/10 11:12:41 | 12.31 | 7.57 | 7.61 | 48396 | 31.51 |
| 19830-017 | 3 | 39 | 9 | 07/17/10 11:12:52 | 12.34 | 7.66 | 7.53 | 48347 | 31.47 |
| 19830-016 | 3 | 40 | 9 | 07/17/10 11:13:11 | 12.25 | 7.02 | 7.57 | 48439 | 31.53 |
| 19830-000 | 3 | 41 | 9 | 07/17/10 11:13:48 | 12.24 | 8.22 | 7.66 | 48355 | 31.47 |
| 19830-010 | 3 | 42 | 9 | 07/17/10 11:14:03 | 12.22 | 8.32 | 7.61 | 48346 | 31.47 |
| 19830-008 | 3 | 43 | 9 | 07/17/10 11:14:19 | 12.12 | 8.17 | 7.58 | 48367 | 31.48 |
| 19830-014 | 3 | 44 | 9 | 07/17/10 11:14:53 | 12.11 | 7.53 | 7.63 | 48365 | 31.48 |
| 19830-004 | 3 | 45 | 9 | 07/17/10 11:15:06 | 12.03 | 7.48 | 7.57 | 48400 | 31.50 |
| 19830-006 | 3 | 46 | 9 | 07/17/10 11:15:45 | 12.11 | 6.71 | 7.38 | 48336 | 31.45 |
| 19830-005 | 3 | 47 | 9 | 07/17/10 11:16:27 | 12.09 | 7.67 | 7.51 | 48318 | 31.44 |
| 19830-011 | 3 | 48 | 9 | 07/17/10 11:17:17 | 11.77 | 6.33 | 7.49 | 48605 | 31.63 |
| 19830-002 | 3 | 49 | 9 | 07/17/10 11:17:31 | 11.90 | 6.26 | 7.57 | 48498 | 31.56 |
| 19830-012 | 3 | 50 | 9 | 07/17/10 11:17:52 | 12.06 | 6.85 | 7.63 | 48440 | 31.53 |
| 19830-001 | 3 | 51 | 9 | 07/17/10 11:18:26 | 11.76 | 7.48 | 7.75 | 48585 | 31.62 |
| 19830-003 | 3 | 52 | 9 | 07/17/10 11:19:28 | 11.76 | 7.92 | 7.68 | 48505 | 31.56 |
| 19830-007 | 3 | 53 | 9 | 07/17/10 11:19:49 | 11.77 | 7.64 | 7.44 | 48462 | 31.53 |
| 19830-015 | 3 | 54 | 9 | 07/17/10 11:20:22 | 11.76 | 7.77 | 7.57 | 48490 | 31.55 |
| 19830-006 | 4 | 55 | 9 | 07/17/10 11:20:48 | 11.70 | 7.83 | 7.50 | 48482 | 31.54 |
| 19830-011 | 4 | 56 | 9 | 07/17/10 11:21:10 | 11.64 | 7.73 | 7.62 | 48560 | 31.59 |
| 19830-012 | 4 | 57 | 9 | 07/17/10 11:21:40 | 11.58 | 8.04 | 7.82 | 48570 | 31.60 |
| 19830-010 | 4 | 58 | 9 | 07/17/10 11:22:09 | 11.52 | 8.07 | 7.70 | 48579 | 31.60 |
| 19830-015 | 4 | 59 | 9 | 07/17/10 11:22:26 | 11.42 | 8.05 | 7.64 | 48605 | 31.62 |
| 19830-009 | 4 | 60 | 9 | 07/17/10 11:22:43 | 11.34 | 7.87 | 7.65 | 48624 | 31.63 |
| 19830-001 | 4 | 61 | 9 | 07/17/10 11:23:00 | 11.39 | 7.94 | 7.61 | 48707 | 31.69 |
| 19830-016 | 4 | 62 | 9 | 07/17/10 11:23:24 | 11.58 | 7.53 | 7.56 | 48577 | 31.60 |
| 19830-008 | 4 | 63 | 9 | 07/17/10 11:23:55 | 11.76 | 7.73 | 7.66 | 48543 | 31.59 |
| 19830-004 | 4 | 64 | 9 | 07/17/10 11:24:34 | 11.94 | 7.21 | 7.55 | 48531 | 31.59 |
| 19830-007 | 4 | 65 | 9 | 07/17/10 11:25:06 | 11.74 | 7.60 | 7.46 | 48498 | 31.55 |
| 19830-014 | 4 | 66 | 9 | 07/17/10 11:25:49 | 11.71 | 6.82 | 7.49 | 48530 | 31.58 |
| 19830-000 | 4 | 67 | 9 | 07/17/10 11:26:31 | 11.68 | 7.70 | 7.53 | 48474 | 31.53 |
| 19830-017 | 4 | 68 | 9 | 07/17/10 11:27:15 | 11.67 | 6.89 | 7.47 | 48497 | 31.55 |
| 19830-013 | 4 | 69 | 9 | 07/17/10 11:27:56 | 11.68 | 7.72 | 7.68 | 48505 | 31.56 |
| 19830-002 | 4 | 70 | 9 | 07/17/10 11:28:42 | 11.69 | 7.59 | 7.72 | 48511 | 31.56 |
| 19830-005 | 4 | 71 | 9 | 07/17/10 11:29:22 | 11.70 | 7.54 | 7.50 | 48452 | 31.52 |
| 19830-003 | 4 | 72 | 9 | 07/17/10 11:29:47 | 11.72 | 7.68 | 7.59 | 48485 | 31.54 |
| 19830-016 | 5 | 73 | 9 | 07/17/10 11:30:02 | 11.68 | 7.84 | 7.59 | 48486 | 31.54 |
| 19830-003 | 5 | 74 | 9 | 07/17/10 11:30:24 | 11.67 | 7.47 | 7.52 | 48493 | 31.55 |
| 19830-000 | 5 | 75 | 9 | 07/17/10 11:30:52 | 11.73 | 7.63 | 7.56 | 48407 | 31.49 |
| 19830-013 | 5 | 76 | 9 | 07/17/10 11:31:07 | 11.76 | 7.78 | 7.56 | 48457 | 31.53 |
| 19830-001 | 5 | 77 | 9 | 07/17/10 11:31:23 | 11.80 | 7.65 | 7.52 | 48405 | 31.49 |
| 19830-002 | 5 | 78 | 9 | 07/17/10 11:31:43 | 11.91 | 7.69 | 7.61 | 48465 | 31.54 |
| 19830-004 | 5 | 79 | 9 | 07/17/10 11:32:02 | 11.99 | 7.46 | 7.52 | 48448 | 31.53 |
| 19830-012 | 5 | 80 | 9 | 07/17/10 11:32:18 | 12.06 | 7.44 | 7.67 | 48492 | 31.57 |
| 19830-005 | 5 | 81 | 9 | 07/17/10 11:32:39 | 11.79 | 7.87 | 7.56 | 48450 | 31.52 |
| 19830-011 | 5 | 82 | 9 | 07/17/10 11:32:56 | 11.70 | 7.59 | 7.58 | 48497 | 31.55 |
| 19830-010 | 5 | 83 | 9 | 07/17/10 11:33:07 | 11.66 | 7.58 | 7.51 | 48482 | 31.54 |
| 19830-017 | 5 | 84 | 9 | 07/17/10 11:33:29 | 11.69 | 6.07 | 7.44 | 48413 | 31.49 |
| 19830-009 | 5 | 85 | 9 | 07/17/10 11:33:55 | 11.69 | 6.51 | 7.53 | 48544 | 31.59 |
| 19830-006 | 5 | 86 | 9 | 07/17/10 11:34:15 | 11.73 | 6.97 | 7.50 | 48446 | 31.52 |
| 19830-008 | 5 | 87 | 9 | 07/17/10 11:34:46 | 11.76 | 7.87 | 7.66 | 48512 | 31.57 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-007 | 5 | 88 | 9 | 07/17/10 11:35:39 | 11.77 | 7.92 | 7.52 | 48390 | 31.48 |
| 19830-014 | 5 | 89 | 9 | 07/17/10 11:35:54 | 11.69 | 7.95 | 7.58 | 48508 | 31.56 |
| 19830-015 | 5 | 90 | 9 | 07/17/10 11:36:09 | 11.66 | 7.92 | 7.65 | 48549 | 31.59 |
| 19830-005 | 6 | 91 | 9 | 07/17/10 11:36:20 | 11.68 | 7.93 | 7.64 | 48502 | 31.55 |
| 19830-007 | 6 | 92 | 9 | 07/17/10 11:36:36 | 11.72 | 7.93 | 7.53 | 48473 | 31.54 |
| 19830-002 | 6 | 93 | 9 | 07/17/10 11:36:48 | 11.77 | 7.86 | 7.57 | 48564 | 31.60 |
| 19830-009 | 6 | 94 | 9 | 07/17/10 11:37:13 | 11.84 | 7.52 | 7.63 | 48509 | 31.57 |
| 19830-013 | 6 | 95 | 9 | 07/17/10 11:37:28 | 11.87 | 7.47 | 7.58 | 48408 | 31.50 |
| 19830-004 | 6 | 96 | 9 | 07/17/10 11:37:44 | 11.92 | 7.65 | 7.60 | 48604 | 31.64 |
| 19830-012 | 6 | 97 | 9 | 07/17/10 11:38:12 | 11.79 | 8.11 | 7.65 | 48542 | 31.59 |
| 19830-015 | 6 | 98 | 9 | 07/17/10 11:38:43 | 11.63 | 7.74 | 7.72 | 48554 | 31.59 |
| 19830-014 | 6 | 99 | 9 | 07/17/10 11:38:59 | 11.61 | 7.71 | 7.74 | 48550 | 31.59 |
| 19830-003 | 6 | 100 | 9 | 07/17/10 11:39:13 | 11.60 | 7.75 | 7.70 | 48635 | 31.65 |
| 19830-010 | 6 | 101 | 9 | 07/17/10 11:39:45 | 11.59 | 8.23 | 7.72 | 47251 | 30.65 |
| 19830-000 | 6 | 102 | 9 | 07/17/10 11:40:05 | 11.58 | 8.29 | 7.68 | 48603 | 31.62 |
| 19830-016 | 6 | 103 | 9 | 07/17/10 11:40:36 | 11.56 | 7.91 | 7.76 | 48657 | 31.66 |
| 19830-001 | 6 | 104 | 9 | 07/17/10 11:41:01 | 11.57 | 7.91 | 7.81 | 48686 | 31.68 |
| 19830-017 | 6 | 105 | 9 | 07/17/10 11:41:27 | 11.48 | 8.15 | 7.71 | 48574 | 31.60 |
| 19830-008 | 6 | 106 | 9 | 07/17/10 11:41:40 | 11.46 | 8.18 | 7.73 | 48590 | 31.61 |
| 19830-011 | 6 | 107 | 9 | 07/17/10 11:42:18 | 11.56 | 7.64 | 7.73 | 48572 | 31.60 |
| 19830-006 | 6 | 108 | 9 | 07/17/10 11:42:58 | 11.68 | 8.04 | 7.62 | 48588 | 31.62 |
| 19830-015 | 7 | 109 | 9 | 07/17/10 11:43:44 | 11.85 | 7.87 | 7.64 | 48507 | 31.57 |
| 19830-017 | 7 | 110 | 9 | 07/17/10 11:44:03 | 11.99 | 7.90 | 7.70 | 48637 | 31.67 |
| 19830-003 | 7 | 111 | 9 | 07/17/10 11:44:23 | 12.10 | 7.86 | 7.67 | 48650 | 31.68 |
| 19830-008 | 7 | 112 | 9 | 07/17/10 11:44:40 | 12.21 | 7.79 | 7.74 | 48684 | 31.71 |
| 19830-006 | 7 | 113 | 9 | 07/17/10 11:45:02 | 12.10 | 8.18 | 7.69 | 48333 | 31.45 |
| 19830-012 | 7 | 114 | 9 | 07/17/10 11:45:19 | 12.03 | 8.14 | 7.73 | 48361 | 31.47 |
| 19830-004 | 7 | 115 | 9 | 07/17/10 11:45:35 | 11.98 | 8.13 | 7.77 | 48379 | 31.48 |
| 19830-011 | 7 | 116 | 9 | 07/17/10 11:46:11 | 11.93 | 7.64 | 7.70 | 48364 | 31.47 |
| 19830-014 | 7 | 117 | 9 | 07/17/10 11:46:44 | 11.85 | 8.08 | 7.78 | 48469 | 31.54 |
| 19830-005 | 7 | 118 | 9 | 07/17/10 11:47:01 | 11.83 | 8.18 | 7.64 | 48357 | 31.46 |
| 19830-001 | 7 | 119 | 9 | 07/17/10 11:47:22 | 11.78 | 8.06 | 7.67 | 48453 | 31.52 |
| 19830-000 | 7 | 120 | 9 | 07/17/10 11:47:36 | 11.79 | 8.09 | 7.70 | 48357 | 31.46 |
| 19830-009 | 7 | 121 | 9 | 07/17/10 11:47:54 | 11.65 | 8.32 | 7.74 | 48458 | 31.52 |
| 19830-010 | 7 | 122 | 9 | 07/17/10 11:48:13 | 11.56 | 7.99 | 7.65 | 48493 | 31.54 |
| 19830-007 | 7 | 123 | 9 | 07/17/10 11:48:36 | 11.59 | 7.79 | 7.52 | 48508 | 31.55 |
| 19830-002 | 7 | 124 | 9 | 07/17/10 11:48:57 | 11.70 | 7.69 | 7.69 | 48561 | 31.60 |
| 19830-013 | 7 | 125 | 9 | 07/17/10 11:49:32 | 11.78 | 7.94 | 7.78 | 48603 | 31.63 |
| 19830-016 | 7 | 126 | 9 | 07/17/10 11:50:01 | 11.96 | 7.82 | 7.71 | 48483 | 31.55 |
| 19830-017 | 8 | 127 | 9 | 07/17/10 11:50:20 | 12.09 | 7.68 | 7.64 | 48486 | 31.56 |
| 19830-013 | 8 | 128 | 9 | 07/17/10 11:50:34 | 12.19 | 7.65 | 7.66 | 48551 | 31.61 |
| 19830-010 | 8 | 129 | 9 | 07/17/10 11:51:02 | 12.12 | 8.09 | 7.76 | 48272 | 31.41 |
| 19830-007 | 8 | 130 | 9 | 07/17/10 11:51:17 | 12.05 | 8.20 | 7.68 | 48375 | 31.48 |
| 19830-011 | 8 | 131 | 9 | 07/17/10 11:52:04 | 11.92 | 6.83 | 7.46 | 48464 | 31.54 |
| 19830-002 | 8 | 132 | 9 | 07/17/10 11:52:24 | 11.95 | 6.85 | 7.50 | 48457 | 31.53 |
| 19830-004 | 8 | 133 | 9 | 07/17/10 11:53:06 | 11.99 | 7.77 | 7.63 | 48363 | 31.47 |
| 19830-003 | 8 | 134 | 9 | 07/17/10 11:53:23 | 11.92 | 7.96 | 7.73 | 48412 | 31.50 |
| 19830-005 | 8 | 135 | 9 | 07/17/10 11:53:36 | 11.87 | 8.10 | 7.61 | 48393 | 31.48 |
| 19830-012 | 8 | 136 | 9 | 07/17/10 11:54:05 | 11.79 | 7.69 | 7.72 | 48444 | 31.52 |
| 19830-006 | 8 | 137 | 9 | 07/17/10 11:54:22 | 11.73 | 7.69 | 7.58 | 48506 | 31.56 |
| 19830-001 | 8 | 138 | 9 | 07/17/10 11:54:38 | 11.71 | 7.61 | 7.69 | 48553 | 31.59 |
| 19830-014 | 8 | 139 | 9 | 07/17/10 11:54:52 | 11.74 | 7.86 | 7.76 | 48557 | 31.60 |
| 19830-000 | 8 | 140 | 9 | 07/17/10 11:55:13 | 11.84 | 8.12 | 7.75 | 48501 | 31.56 |
| 19830-009 | 8 | 141 | 9 | 07/17/10 11:55:29 | 11.89 | 8.37 | 7.84 | 48585 | 31.62 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 142 | 9 | 07/17/10 11:55:42 | 11.96 | 8.30 | 7.89 | 48577 | 31.62 |
| 19830-015 | 8 | 143 | 9 | 07/17/10 11:55:59 | 12.09 | 8.22 | 7.75 | 48552 | 31.61 |
| 19830-016 | 8 | 144 | 9 | 07/17/10 11:56:14 | 12.22 | 7.94 | 7.71 | 48571 | 31.63 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 10 | 07/18/10 10:51:17 | 13.18 | 7.71 | 7.77 | 47854 | 31.15 |
| 19830-016 | 1 | 2 | 10 | 07/18/10 10:52:03 | 13.29 | 7.23 | 7.75 | 47348 | 30.79 |
| 19830-015 | 1 | 3 | 10 | 07/18/10 10:52:20 | 13.23 | 7.25 | 7.67 | 47805 | 31.11 |
| 19830-017 | 1 | 4 | 10 | 07/18/10 10:52:42 | 13.14 | 7.20 | 7.65 | 47800 | 31.11 |
| 19830-001 | 1 | 5 | 10 | 07/18/10 10:53:02 | 12.87 | 7.20 | 7.68 | 47800 | 31.10 |
| 19830-011 | 1 | 6 | 10 | 07/18/10 10:53:21 | 12.94 | 7.14 | 7.64 | 47854 | 31.14 |
| 19830-014 | 1 | 7 | 10 | 07/18/10 10:53:47 | 13.02 | 6.86 | 7.67 | 47851 | 31.14 |
| 19830-009 | 1 | 8 | 10 | 07/18/10 10:54:02 | 12.91 | 6.73 | 7.67 | 47809 | 31.11 |
| 19830-012 | 1 | 9 | 10 | 07/18/10 10:54:20 | 12.85 | 6.86 | 7.64 | 47803 | 31.10 |
| 19830-010 | 1 | 10 | 10 | 07/18/10 10:54:44 | 12.85 | 6.93 | 7.69 | 47841 | 31.13 |
| 19830-008 | 1 | 11 | 10 | 07/18/10 10:55:08 | 12.94 | 7.26 | 7.80 | 47847 | 31.13 |
| 19830-006 | 1 | 12 | 10 | 07/18/10 10:55:26 | 12.99 | 7.15 | 7.65 | 47815 | 31.11 |
| 19830-004 | 1 | 13 | 10 | 07/18/10 10:55:42 | 12.84 | 7.07 | 7.59 | 47791 | 31.09 |
| 19830-013 | 1 | 14 | 10 | 07/18/10 10:55:57 | 12.78 | 7.31 | 7.70 | 47858 | 31.14 |
| 19830-000 | 1 | 15 | 10 | 07/18/10 10:56:13 | 12.76 | 7.41 | 7.69 | 47825 | 31.11 |
| 19830-005 | 1 | 16 | 10 | 07/18/10 10:56:26 | 12.67 | 7.72 | 7.68 | 47853 | 31.13 |
| 19830-007 | 1 | 17 | 10 | 07/18/10 10:56:40 | 12.61 | 7.85 | 7.62 | 47871 | 31.14 |
| 19830-003 | 1 | 18 | 10 | 07/18/10 10:56:58 | 12.60 | 7.87 | 7.64 | 47893 | 31.15 |
| 19830-009 | 2 | 19 | 10 | 07/18/10 10:57:28 | 13.09 | 7.45 | 7.68 | 47845 | 31.14 |
| 19830-016 | 2 | 20 | 10 | 07/18/10 10:58:05 | 13.21 | 5.56 | 7.55 | 47788 | 31.10 |
| 19830-007 | 2 | 21 | 10 | 07/18/10 10:58:48 | 13.34 | 6.21 | 7.42 | 47738 | 31.07 |
| 19830-015 | 2 | 22 | 10 | 07/18/10 11:00:01 | 13.31 | 6.96 | 7.47 | 47740 | 31.07 |
| 19830-008 | 2 | 23 | 10 | 07/18/10 11:00:16 | 13.31 | 7.29 | 7.66 | 47793 | 31.11 |
| 19830-002 | 2 | 24 | 10 | 07/18/10 11:00:29 | 13.34 | 7.56 | 7.73 | 47841 | 31.14 |
| 19830-012 | 2 | 25 | 10 | 07/18/10 11:00:46 | 13.27 | 7.45 | 7.73 | 47691 | 31.03 |
| 19830-004 | 2 | 26 | 10 | 07/18/10 11:01:08 | 13.14 | 7.46 | 7.62 | 47732 | 31.06 |
| 19830-000 | 2 | 27 | 10 | 07/18/10 11:01:26 | 13.09 | 7.61 | 7.63 | 47801 | 31.11 |
| 19830-003 | 2 | 28 | 10 | 07/18/10 11:01:42 | 13.19 | 7.81 | 7.63 | 47763 | 31.08 |
| 19830-011 | 2 | 29 | 10 | 07/18/10 11:02:02 | 13.08 | 7.63 | 7.63 | 47768 | 31.08 |
| 19830-017 | 2 | 30 | 10 | 07/18/10 11:02:16 | 13.13 | 7.51 | 7.63 | 47812 | 31.12 |
| 19830-014 | 2 | 31 | 10 | 07/18/10 11:02:29 | 13.10 | 7.49 | 7.67 | 47786 | 31.10 |
| 19830-001 | 2 | 32 | 10 | 07/18/10 11:02:51 | 12.96 | 7.10 | 7.70 | 47781 | 31.09 |
| 19830-013 | 2 | 33 | 10 | 07/18/10 11:03:10 | 12.89 | 7.25 | 7.74 | 47849 | 31.13 |
| 19830-010 | 2 | 34 | 10 | 07/18/10 11:03:24 | 12.95 | 7.56 | 7.70 | 47832 | 31.12 |
| 19830-006 | 2 | 35 | 10 | 07/18/10 11:03:59 | 13.04 | 7.45 | 7.55 | 47834 | 31.13 |
| 19830-005 | 2 | 36 | 10 | 07/18/10 11:04:16 | 13.15 | 7.21 | 7.54 | 47831 | 31.13 |
| 19830-013 | 3 | 37 | 10 | 07/18/10 11:04:34 | 13.18 | 7.00 | 7.59 | 47823 | 31.13 |
| 19830-009 | 3 | 38 | 10 | 07/18/10 11:04:57 | 13.24 | 7.12 | 7.64 | 47784 | 31.10 |
| 19830-017 | 3 | 39 | 10 | 07/18/10 11:05:15 | 13.27 | 7.15 | 7.55 | 47803 | 31.11 |
| 19830-016 | 3 | 40 | 10 | 07/18/10 11:05:37 | 13.19 | 6.98 | 7.64 | 47804 | 31.11 |
| 19830-000 | 3 | 41 | 10 | 07/18/10 11:06:00 | 13.22 | 7.81 | 7.71 | 47787 | 31.10 |
| 19830-010 | 3 | 42 | 10 | 07/18/10 11:06:13 | 13.15 | 8.08 | 7.62 | 47652 | 31.00 |
| 19830-008 | 3 | 43 | 10 | 07/18/10 11:06:38 | 12.82 | 7.79 | 7.65 | 47829 | 31.12 |
| 19830-014 | 3 | 44 | 10 | 07/18/10 11:06:55 | 13.07 | 7.56 | 7.71 | 47899 | 31.18 |
| 19830-004 | 3 | 45 | 10 | 07/18/10 11:07:09 | 13.06 | 7.49 | 7.67 | 47800 | 31.10 |
| 19830-006 | 3 | 46 | 10 | 07/18/10 11:07:21 | 13.12 | 7.41 | 7.61 | 47824 | 31.12 |
| 19830-005 | 3 | 47 | 10 | 07/18/10 11:07:36 | 13.17 | 7.27 | 7.58 | 47767 | 31.08 |
| 19830-011 | 3 | 48 | 10 | 07/18/10 11:07:54 | 12.74 | 7.49 | 7.64 | 47801 | 31.09 |
| 19830-002 | 3 | 49 | 10 | 07/18/10 11:08:09 | 13.01 | 7.20 | 7.68 | 47936 | 31.20 |
| 19830-012 | 3 | 50 | 10 | 07/18/10 11:08:23 | 13.02 | 6.90 | 7.68 | 47742 | 31.06 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-001 | 3 | 51 | 10 | 07/18/10 11:08:50 | 12.25 | 7.57 | 7.73 | 47881 | 31.13 |
| 19830-003 | 3 | 52 | 10 | 07/18/10 11:09:14 | 12.35 | 7.96 | 7.72 | 47921 | 31.16 |
| 19830-007 | 3 | 53 | 10 | 07/18/10 11:09:53 | 12.51 | 6.69 | 7.41 | 47866 | 31.13 |
| 19830-015 | 3 | 54 | 10 | 07/18/10 11:10:28 | 12.58 | 7.57 | 7.61 | 47858 | 31.13 |
| 19830-006 | 4 | 55 | 10 | 07/18/10 11:10:46 | 12.49 | 7.79 | 7.63 | 47836 | 31.11 |
| 19830-011 | 4 | 56 | 10 | 07/18/10 11:11:06 | 12.51 | 7.76 | 7.67 | 47918 | 31.17 |
| 19830-012 | 4 | 57 | 10 | 07/18/10 11:11:23 | 12.51 | 7.81 | 7.78 | 47909 | 31.16 |
| 19830-010 | 4 | 58 | 10 | 07/18/10 11:11:40 | 12.29 | 8.08 | 7.75 | 47852 | 31.11 |
| 19830-015 | 4 | 59 | 10 | 07/18/10 11:11:58 | 11.95 | 8.03 | 7.68 | 47894 | 31.13 |
| 19830-009 | 4 | 60 | 10 | 07/18/10 11:12:17 | 11.91 | 7.93 | 7.69 | 47983 | 31.19 |
| 19830-001 | 4 | 61 | 10 | 07/18/10 11:12:34 | 11.92 | 8.02 | 7.66 | 48009 | 31.21 |
| 19830-016 | 4 | 62 | 10 | 07/18/10 11:12:54 | 12.26 | 7.66 | 7.65 | 47994 | 31.21 |
| 19830-008 | 4 | 63 | 10 | 07/18/10 11:13:14 | 12.36 | 7.70 | 7.73 | 47968 | 31.20 |
| 19830-004 | 4 | 64 | 10 | 07/18/10 11:13:28 | 12.51 | 7.80 | 7.68 | 47968 | 31.21 |
| 19830-007 | 4 | 65 | 10 | 07/18/10 11:13:42 | 12.36 | 7.68 | 7.59 | 47852 | 31.12 |
| 19830-014 | 4 | 66 | 10 | 07/18/10 11:13:57 | 12.53 | 7.51 | 7.58 | 47938 | 31.18 |
| 19830-000 | 4 | 67 | 10 | 07/18/10 11:14:13 | 12.60 | 7.26 | 7.60 | 47873 | 31.14 |
| 19830-017 | 4 | 68 | 10 | 07/18/10 11:14:26 | 12.68 | 7.44 | 7.59 | 47902 | 31.16 |
| 19830-013 | 4 | 69 | 10 | 07/18/10 11:14:39 | 12.76 | 7.31 | 7.66 | 47877 | 31.15 |
| 19830-002 | 4 | 70 | 10 | 07/18/10 11:14:53 | 12.78 | 7.55 | 7.70 | 47844 | 31.13 |
| 19830-005 | 4 | 71 | 10 | 07/18/10 11:15:05 | 12.74 | 7.59 | 7.64 | 47804 | 31.10 |
| 19830-003 | 4 | 72 | 10 | 07/18/10 11:15:27 | 12.50 | 7.72 | 7.66 | 47817 | 31.10 |
| 19830-016 | 5 | 73 | 10 | 07/18/10 11:15:48 | 12.54 | 7.70 | 7.65 | 47870 | 31.14 |
| 19830-003 | 5 | 74 | 10 | 07/18/10 11:16:13 | 12.73 | 7.23 | 7.59 | 47847 | 31.13 |
| 19830-000 | 5 | 75 | 10 | 07/18/10 11:16:41 | 12.96 | 7.51 | 7.66 | 47808 | 31.11 |
| 19830-013 | 5 | 76 | 10 | 07/18/10 11:16:59 | 13.03 | 7.58 | 7.62 | 47809 | 31.11 |
| 19830-001 | 5 | 77 | 10 | 07/18/10 11:17:23 | 13.07 | 7.56 | 7.56 | 47729 | 31.05 |
| 19830-002 | 5 | 78 | 10 | 07/18/10 11:17:48 | 13.20 | 7.20 | 7.62 | 47816 | 31.12 |
| 19830-004 | 5 | 79 | 10 | 07/18/10 11:18:07 | 13.11 | 7.09 | 7.61 | 47783 | 31.09 |
| 19830-012 | 5 | 80 | 10 | 07/18/10 11:18:24 | 12.99 | 7.45 | 7.72 | 47808 | 31.11 |
| 19830-005 | 5 | 81 | 10 | 07/18/10 11:18:45 | 12.48 | 7.86 | 7.63 | 47780 | 31.07 |
| 19830-011 | 5 | 82 | 10 | 07/18/10 11:19:02 | 12.61 | 7.47 | 7.67 | 47894 | 31.16 |
| 19830-010 | 5 | 83 | 10 | 07/18/10 11:19:31 | 12.68 | 5.60 | 7.52 | 47849 | 31.13 |
| 19830-017 | 5 | 84 | 10 | 07/18/10 11:20:50 | 12.79 | 6.63 | 7.58 | 47800 | 31.09 |
| 19830-009 | 5 | 85 | 10 | 07/18/10 11:21:11 | 12.73 | 6.86 | 7.66 | 47850 | 31.13 |
| 19830-006 | 5 | 86 | 10 | 07/18/10 11:21:33 | 12.92 | 7.28 | 7.55 | 47829 | 31.12 |
| 19830-008 | 5 | 87 | 10 | 07/18/10 11:21:51 | 12.91 | 7.47 | 7.67 | 47839 | 31.13 |
| 19830-007 | 5 | 88 | 10 | 07/18/10 11:22:09 | 12.59 | 7.85 | 7.61 | 47771 | 31.07 |
| 19830-014 | 5 | 89 | 10 | 07/18/10 11:22:28 | 12.40 | 7.97 | 7.66 | 47851 | 31.12 |
| 19830-015 | 5 | 90 | 10 | 07/18/10 11:22:43 | 12.50 | 7.83 | 7.67 | 47934 | 31.18 |
| 19830-005 | 6 | 91 | 10 | 07/18/10 11:23:00 | 12.68 | 7.83 | 7.67 | 47876 | 31.15 |
| 19830-007 | 6 | 92 | 10 | 07/18/10 11:23:18 | 12.78 | 7.78 | 7.56 | 47835 | 31.12 |
| 19830-002 | 6 | 93 | 10 | 07/18/10 11:23:46 | 12.90 | 7.49 | 7.65 | 47830 | 31.12 |
| 19830-009 | 6 | 94 | 10 | 07/18/10 11:23:59 | 12.91 | 7.46 | 7.68 | 47826 | 31.12 |
| 19830-013 | 6 | 95 | 10 | 07/18/10 11:24:14 | 12.92 | 7.45 | 7.73 | 47837 | 31.13 |
| 19830-004 | 6 | 96 | 10 | 07/18/10 11:24:36 | 12.77 | 7.63 | 7.70 | 47862 | 31.14 |
| 19830-012 | 6 | 97 | 10 | 07/18/10 11:25:19 | 12.31 | 8.04 | 7.71 | 47895 | 31.14 |
| 19830-015 | 6 | 98 | 10 | 07/18/10 11:25:42 | 12.25 | 7.91 | 7.74 | 47901 | 31.15 |
| 19830-014 | 6 | 99 | 10 | 07/18/10 11:26:01 | 12.19 | 7.76 | 7.72 | 47933 | 31.17 |
| 19830-003 | 6 | 100 | 10 | 07/18/10 11:26:20 | 12.11 | 7.84 | 7.70 | 47924 | 31.16 |
| 19830-010 | 6 | 101 | 10 | 07/18/10 11:26:34 | 12.09 | 8.04 | 7.71 | 47984 | 31.20 |
| 19830-000 | 6 | 102 | 10 | 07/18/10 11:26:56 | 12.17 | 8.21 | 7.70 | 47960 | 31.19 |
| 19830-016 | 6 | 103 | 10 | 07/18/10 11:27:14 | 12.13 | 8.14 | 7.74 | 47956 | 31.18 |
| 19830-001 | 6 | 104 | 10 | 07/18/10 11:27:27 | 11.96 | 8.02 | 7.78 | 47870 | 31.11 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-017 | 6 | 105 | 10 | 07/18/10 11:27:46 | 11.72 | 8.19 | 7.72 | 47942 | 31.15 |
| 19830-008 | 6 | 106 | 10 | 07/18/10 11:28:03 | 11.72 | 8.24 | 7.74 | 47999 | 31.19 |
| 19830-011 | 6 | 107 | 10 | 07/18/10 11:28:24 | 11.89 | 8.05 | 7.75 | 48004 | 31.20 |
| 19830-006 | 6 | 108 | 10 | 07/18/10 11:28:49 | 12.07 | 7.90 | 7.65 | 48007 | 31.22 |
| 19830-015 | 7 | 109 | 10 | 07/18/10 11:29:09 | 12.24 | 7.94 | 7.66 | 48044 | 31.25 |
| 19830-017 | 7 | 110 | 10 | 07/18/10 11:29:26 | 12.45 | 7.91 | 7.72 | 48019 | 31.24 |
| 19830-003 | 7 | 111 | 10 | 07/18/10 11:29:43 | 12.61 | 7.94 | 7.69 | 47976 | 31.22 |
| 19830-008 | 7 | 112 | 10 | 07/18/10 11:29:59 | 12.67 | 7.93 | 7.75 | 47981 | 31.22 |
| 19830-006 | 7 | 113 | 10 | 07/18/10 11:30:27 | 13.01 | 8.03 | 7.67 | 47816 | 31.11 |
| 19830-012 | 7 | 114 | 10 | 07/18/10 11:30:37 | 13.13 | 7.94 | 7.69 | 47877 | 31.16 |
| 19830-004 | 7 | 115 | 10 | 07/18/10 11:30:51 | 13.22 | 7.94 | 7.76 | 47813 | 31.12 |
| 19830-011 | 7 | 116 | 10 | 07/18/10 11:31:04 | 13.26 | 7.97 | 7.74 | 47790 | 31.10 |
| 19830-014 | 7 | 117 | 10 | 07/18/10 11:31:14 | 13.20 | 7.76 | 7.76 | 47735 | 31.06 |
| 19830-005 | 7 | 118 | 10 | 07/18/10 11:31:25 | 13.12 | 7.84 | 7.70 | 47725 | 31.05 |
| 19830-001 | 7 | 119 | 10 | 07/18/10 11:31:35 | 12.95 | 7.88 | 7.67 | 47652 | 30.99 |
| 19830-000 | 7 | 120 | 10 | 07/18/10 11:31:54 | 12.78 | 8.08 | 7.71 | 47759 | 31.06 |
| 19830-009 | 7 | 121 | 10 | 07/18/10 11:32:09 | 12.43 | 8.33 | 7.75 | 47738 | 31.04 |
| 19830-010 | 7 | 122 | 10 | 07/18/10 11:32:27 | 12.49 | 7.99 | 7.69 | 47918 | 31.17 |
| 19830-007 | 7 | 123 | 10 | 07/18/10 11:32:38 | 12.52 | 7.87 | 7.63 | 47861 | 31.13 |
| 19830-002 | 7 | 124 | 10 | 07/18/10 11:32:51 | 12.54 | 7.77 | 7.68 | 47915 | 31.17 |
| 19830-013 | 7 | 125 | 10 | 07/18/10 11:33:07 | 12.60 | 7.76 | 7.76 | 47948 | 31.19 |
| 19830-016 | 7 | 126 | 10 | 07/18/10 11:33:26 | 12.85 | 7.81 | 7.71 | 47898 | 31.17 |
| 19830-017 | 8 | 127 | 10 | 07/18/10 11:33:39 | 12.97 | 7.63 | 7.68 | 47899 | 31.17 |
| 19830-013 | 8 | 128 | 10 | 07/18/10 11:33:50 | 13.01 | 7.60 | 7.68 | 47847 | 31.14 |
| 19830-010 | 8 | 129 | 10 | 07/18/10 11:34:10 | 12.98 | 7.84 | 7.78 | 47841 | 31.13 |
| 19830-007 | 8 | 130 | 10 | 07/18/10 11:34:32 | 13.18 | 7.98 | 7.67 | 47806 | 31.11 |
| 19830-011 | 8 | 131 | 10 | 07/18/10 11:34:48 | 13.01 | 7.80 | 7.62 | 47774 | 31.08 |
| 19830-002 | 8 | 132 | 10 | 07/18/10 11:35:00 | 13.06 | 7.32 | 7.69 | 47866 | 31.15 |
| 19830-004 | 8 | 133 | 10 | 07/18/10 11:35:10 | 13.18 | 7.08 | 7.70 | 47890 | 31.17 |
| 19830-003 | 8 | 134 | 10 | 07/18/10 11:35:32 | 13.15 | 7.68 | 7.75 | 47783 | 31.10 |
| 19830-005 | 8 | 135 | 10 | 07/18/10 11:35:45 | 13.02 | 7.87 | 7.63 | 47751 | 31.07 |
| 19830-012 | 8 | 136 | 10 | 07/18/10 11:36:12 | 12.65 | 7.57 | 7.68 | 47782 | 31.08 |
| 19830-006 | 8 | 137 | 10 | 07/18/10 11:36:27 | 12.53 | 7.58 | 7.62 | 47811 | 31.09 |
| 19830-001 | 8 | 138 | 10 | 07/18/10 11:36:45 | 12.59 | 7.58 | 7.71 | 47904 | 31.16 |
| 19830-014 | 8 | 139 | 10 | 07/18/10 11:36:53 | 12.69 | 7.77 | 7.75 | 47990 | 31.23 |
| 19830-000 | 8 | 140 | 10 | 07/18/10 11:37:09 | 12.84 | 7.93 | 7.75 | 47861 | 31.14 |
| 19830-009 | 8 | 141 | 10 | 07/18/10 11:37:21 | 12.84 | 8.13 | 7.77 | 47843 | 31.13 |
| 19830-008 | 8 | 142 | 10 | 07/18/10 11:37:35 | 12.83 | 8.14 | 7.82 | 47885 | 31.16 |
| 19830-015 | 8 | 143 | 10 | 07/18/10 11:37:49 | 12.94 | 8.17 | 7.73 | 47831 | 31.12 |
| 19830-016 | 8 | 144 | 10 | 07/18/10 11:37:59 | 13.00 | 7.95 | 7.67 | 47879 | 31.16 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 11 | 07/19/10 09:57:20 | 13.86 | 8.07 | 7.82 | 47995 | 31.27 |
| 19830-016 | 1 | 2 | 11 | 07/19/10 09:57:58 | 13.90 | 7.84 | 7.79 | 47929 | 31.23 |
| 19830-015 | 1 | 3 | 11 | 07/19/10 09:58:13 | 13.94 | 7.80 | 7.72 | 47996 | 31.28 |
| 19830-017 | 1 | 4 | 11 | 07/19/10 09:58:29 | 13.88 | 7.70 | 7.70 | 47956 | 31.24 |
| 19830-001 | 1 | 5 | 11 | 07/19/10 09:58:58 | 13.55 | 7.57 | 7.73 | 47996 | 31.26 |
| 19830-011 | 1 | 6 | 11 | 07/19/10 09:59:12 | 13.72 | 7.52 | 7.69 | 48091 | 31.34 |
| 19830-014 | 1 | 7 | 11 | 07/19/10 09:59:30 | 13.80 | 7.52 | 7.70 | 48041 | 31.30 |
| 19830-009 | 1 | 8 | 11 | 07/19/10 09:59:49 | 13.60 | 7.27 | 7.70 | 47971 | 31.25 |
| 19830-012 | 1 | 9 | 11 | 07/19/10 10:00:06 | 13.58 | 7.10 | 7.72 | 48021 | 31.28 |
| 19830-010 | 1 | 10 | 11 | 07/19/10 10:00:18 | 13.56 | 6.95 | 7.74 | 47989 | 31.26 |
| 19830-008 | 1 | 11 | 11 | 07/19/10 10:00:35 | 13.66 | 7.48 | 7.80 | 48025 | 31.29 |
| 19830-006 | 1 | 12 | 11 | 07/19/10 10:00:46 | 13.69 | 7.59 | 7.73 | 48032 | 31.29 |
| 19830-004 | 1 | 13 | 11 | 07/19/10 10:01:09 | 13.46 | 7.62 | 7.67 | 47992 | 31.26 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-013 | 1 | 14 | 11 | 07/19/10 10:01:20 | 13.45 | 7.70 | 7.70 | 48050 | 31.30 |
| 19830-000 | 1 | 15 | 11 | 07/19/10 10:01:32 | 13.47 | 7.75 | 7.73 | 48039 | 31.29 |
| 19830-005 | 1 | 16 | 11 | 07/19/10 10:01:45 | 13.35 | 8.01 | 7.72 | 47985 | 31.25 |
| 19830-007 | 1 | 17 | 11 | 07/19/10 10:01:58 | 13.26 | 8.09 | 7.68 | 48033 | 31.28 |
| 19830-003 | 1 | 18 | 11 | 07/19/10 10:02:10 | 13.20 | 8.11 | 7.68 | 48025 | 31.27 |
| 19830-009 | 2 | 19 | 11 | 07/19/10 10:02:35 | 13.80 | 7.81 | 7.72 | 48070 | 31.32 |
| 19830-016 | 2 | 20 | 11 | 07/19/10 10:03:06 | 13.99 | 6.93 | 7.74 | 47944 | 31.24 |
| 19830-007 | 2 | 21 | 11 | 07/19/10 10:03:17 | 14.12 | 6.81 | 7.66 | 48067 | 31.33 |
| 19830-015 | 2 | 22 | 11 | 07/19/10 10:03:34 | 14.19 | 7.18 | 7.66 | 47968 | 31.26 |
| 19830-008 | 2 | 23 | 11 | 07/19/10 10:03:49 | 14.15 | 7.54 | 7.74 | 47964 | 31.26 |
| 19830-002 | 2 | 24 | 11 | 07/19/10 10:04:06 | 14.17 | 7.66 | 7.78 | 47978 | 31.27 |
| 19830-012 | 2 | 25 | 11 | 07/19/10 10:04:21 | 14.06 | 7.53 | 7.69 | 47814 | 31.15 |
| 19830-004 | 2 | 26 | 11 | 07/19/10 10:04:32 | 13.96 | 7.61 | 7.68 | 47773 | 31.11 |
| 19830-000 | 2 | 27 | 11 | 07/19/10 10:04:45 | 13.83 | 7.69 | 7.68 | 47910 | 31.21 |
| 19830-003 | 2 | 28 | 11 | 07/19/10 10:04:54 | 13.83 | 7.90 | 7.69 | 47981 | 31.26 |
| 19830-011 | 2 | 29 | 11 | 07/19/10 10:05:08 | 13.76 | 7.93 | 7.67 | 47931 | 31.22 |
| 19830-017 | 2 | 30 | 11 | 07/19/10 10:05:24 | 13.85 | 7.72 | 7.65 | 47997 | 31.27 |
| 19830-014 | 2 | 31 | 11 | 07/19/10 10:05:39 | 13.77 | 7.56 | 7.68 | 47948 | 31.24 |
| 19830-001 | 2 | 32 | 11 | 07/19/10 10:05:51 | 13.65 | 7.38 | 7.70 | 47888 | 31.19 |
| 19830-013 | 2 | 33 | 11 | 07/19/10 10:06:01 | 13.57 | 7.34 | 7.74 | 47961 | 31.24 |
| 19830-010 | 2 | 34 | 11 | 07/19/10 10:06:14 | 13.60 | 7.63 | 7.72 | 48009 | 31.27 |
| 19830-006 | 2 | 35 | 11 | 07/19/10 10:06:30 | 13.61 | 7.77 | 7.67 | 48184 | 31.40 |
| 19830-005 | 2 | 36 | 11 | 07/19/10 10:06:43 | 13.86 | 7.66 | 7.61 | 48085 | 31.34 |
| 19830-013 | 3 | 37 | 11 | 07/19/10 10:07:00 | 13.93 | 7.45 | 7.65 | 48006 | 31.28 |
| 19830-009 | 3 | 38 | 11 | 07/19/10 10:07:12 | 14.00 | 7.34 | 7.68 | 48038 | 31.31 |
| 19830-017 | 3 | 39 | 11 | 07/19/10 10:07:23 | 14.05 | 7.53 | 7.64 | 48012 | 31.29 |
| 19830-016 | 3 | 40 | 11 | 07/19/10 10:07:35 | 13.94 | 7.38 | 7.65 | 47923 | 31.22 |
| 19830-000 | 3 | 41 | 11 | 07/19/10 10:07:46 | 14.07 | 7.45 | 7.70 | 48093 | 31.35 |
| 19830-010 | 3 | 42 | 11 | 07/19/10 10:08:01 | 14.05 | 7.94 | 7.71 | 47911 | 31.22 |
| 19830-008 | 3 | 43 | 11 | 07/19/10 10:08:21 | 13.34 | 8.04 | 7.66 | 47931 | 31.21 |
| 19830-014 | 3 | 44 | 11 | 07/19/10 10:08:39 | 13.76 | 7.72 | 7.75 | 48104 | 31.35 |
| 19830-004 | 3 | 45 | 11 | 07/19/10 10:08:55 | 13.78 | 7.62 | 7.68 | 47834 | 31.15 |
| 19830-006 | 3 | 46 | 11 | 07/19/10 10:09:14 | 13.82 | 7.47 | 7.63 | 47960 | 31.25 |
| 19830-005 | 3 | 47 | 11 | 07/19/10 10:09:26 | 13.81 | 7.33 | 7.61 | 47946 | 31.24 |
| 19830-011 | 3 | 48 | 11 | 07/19/10 10:09:46 | 13.45 | 7.57 | 7.72 | 47979 | 31.25 |
| 19830-002 | 3 | 49 | 11 | 07/19/10 10:10:01 | 13.70 | 7.49 | 7.73 | 48079 | 31.33 |
| 19830-012 | 3 | 50 | 11 | 07/19/10 10:10:16 | 13.64 | 7.25 | 7.72 | 47897 | 31.19 |
| 19830-001 | 3 | 51 | 11 | 07/19/10 10:10:45 | 12.91 | 7.73 | 7.74 | 48003 | 31.25 |
| 19830-003 | 3 | 52 | 11 | 07/19/10 10:11:02 | 13.02 | 7.87 | 7.74 | 48097 | 31.32 |
| 19830-007 | 3 | 53 | 11 | 07/19/10 10:11:15 | 13.18 | 8.02 | 7.61 | 48107 | 31.33 |
| 19830-015 | 3 | 54 | 11 | 07/19/10 10:11:29 | 13.32 | 7.75 | 7.64 | 48088 | 31.32 |
| 19830-006 | 4 | 55 | 11 | 07/19/10 10:11:44 | 13.24 | 7.92 | 7.66 | 47990 | 31.25 |
| 19830-011 | 4 | 56 | 11 | 07/19/10 10:12:16 | 13.25 | 7.85 | 7.71 | 48051 | 31.29 |
| 19830-012 | 4 | 57 | 11 | 07/19/10 10:12:36 | 13.26 | 8.04 | 7.80 | 48036 | 31.28 |
| 19830-010 | 4 | 58 | 11 | 07/19/10 10:12:49 | 13.08 | 8.28 | 7.77 | 47943 | 31.21 |
| 19830-015 | 4 | 59 | 11 | 07/19/10 10:13:12 | 12.71 | 8.12 | 7.70 | 48054 | 31.28 |
| 19830-009 | 4 | 60 | 11 | 07/19/10 10:13:33 | 12.69 | 8.08 | 7.77 | 48110 | 31.32 |
| 19830-001 | 4 | 61 | 11 | 07/19/10 10:13:46 | 12.68 | 8.22 | 7.71 | 48108 | 31.31 |
| 19830-016 | 4 | 62 | 11 | 07/19/10 10:14:02 | 13.09 | 7.84 | 7.68 | 48186 | 31.39 |
| 19830-008 | 4 | 63 | 11 | 07/19/10 10:14:17 | 13.17 | 7.76 | 7.72 | 48091 | 31.32 |
| 19830-004 | 4 | 64 | 11 | 07/19/10 10:14:36 | 13.29 | 7.78 | 7.69 | 48062 | 31.30 |
| 19830-007 | 4 | 65 | 11 | 07/19/10 10:15:03 | 13.04 | 7.68 | 7.60 | 48027 | 31.27 |
| 19830-014 | 4 | 66 | 11 | 07/19/10 10:15:18 | 13.25 | 7.57 | 7.66 | 48125 | 31.35 |
| 19830-000 | 4 | 67 | 11 | 07/19/10 10:15:37 | 13.38 | 7.55 | 7.68 | 48021 | 31.28 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-017 | 4 | 68 | 11 | 07/19/10 10:15:54 | 13.46 | 7.69 | 7.66 | 48029 | 31.28 |
| 19830-013 | 4 | 69 | 11 | 07/19/10 10:16:12 | 13.56 | 7.59 | 7.72 | 48011 | 31.27 |
| 19830-002 | 4 | 70 | 11 | 07/19/10 10:16:27 | 13.54 | 7.72 | 7.65 | 47897 | 31.19 |
| 19830-005 | 4 | 71 | 11 | 07/19/10 10:16:43 | 13.47 | 7.69 | 7.66 | 47972 | 31.24 |
| 19830-003 | 4 | 72 | 11 | 07/19/10 10:16:54 | 13.27 | 7.76 | 7.68 | 47886 | 31.17 |
| 19830-016 | 5 | 73 | 11 | 07/19/10 10:17:16 | 13.31 | 7.79 | 7.68 | 48024 | 31.28 |
| 19830-003 | 5 | 74 | 11 | 07/19/10 10:17:29 | 13.37 | 7.65 | 7.65 | 48044 | 31.29 |
| 19830-000 | 5 | 75 | 11 | 07/19/10 10:17:48 | 13.68 | 7.62 | 7.70 | 48031 | 31.29 |
| 19830-013 | 5 | 76 | 11 | 07/19/10 10:18:03 | 13.75 | 7.81 | 7.67 | 47987 | 31.26 |
| 19830-001 | 5 | 77 | 11 | 07/19/10 10:18:13 | 13.75 | 7.71 | 7.63 | 47960 | 31.24 |
| 19830-002 | 5 | 78 | 11 | 07/19/10 10:18:23 | 13.75 | 7.78 | 7.67 | 48042 | 31.30 |
| 19830-004 | 5 | 79 | 11 | 07/19/10 10:18:37 | 13.78 | 7.54 | 7.67 | 47979 | 31.26 |
| 19830-012 | 5 | 80 | 11 | 07/19/10 10:18:49 | 13.72 | 7.54 | 7.72 | 47942 | 31.23 |
| 19830-005 | 5 | 81 | 11 | 07/19/10 10:19:29 | 13.01 | 8.06 | 7.68 | 48101 | 31.32 |
| 19830-011 | 5 | 82 | 11 | 07/19/10 10:19:46 | 13.37 | 7.63 | 7.70 | 47889 | 31.18 |
| 19830-010 | 5 | 83 | 11 | 07/19/10 10:19:56 | 13.38 | 7.66 | 7.71 | 47990 | 31.25 |
| 19830-017 | 5 | 84 | 11 | 07/19/10 10:20:25 | 13.54 | 7.29 | 7.67 | 47991 | 31.26 |
| 19830-009 | 5 | 85 | 11 | 07/19/10 10:20:48 | 13.37 | 7.36 | 7.68 | 48010 | 31.27 |
| 19830-006 | 5 | 86 | 11 | 07/19/10 10:21:04 | 13.46 | 7.54 | 7.60 | 48051 | 31.30 |
| 19830-008 | 5 | 87 | 11 | 07/19/10 10:21:22 | 13.61 | 7.71 | 7.71 | 48027 | 31.29 |
| 19830-007 | 5 | 88 | 11 | 07/19/10 10:21:44 | 13.27 | 8.02 | 7.62 | 47964 | 31.23 |
| 19830-014 | 5 | 89 | 11 | 07/19/10 10:22:08 | 13.13 | 8.13 | 7.72 | 48042 | 31.28 |
| 19830-015 | 5 | 90 | 11 | 07/19/10 10:22:29 | 13.27 | 7.93 | 7.72 | 48052 | 31.29 |
| 19830-005 | 6 | 91 | 11 | 07/19/10 10:22:45 | 13.43 | 7.91 | 7.72 | 48052 | 31.30 |
| 19830-007 | 6 | 92 | 11 | 07/19/10 10:22:55 | 13.46 | 7.95 | 7.66 | 48000 | 31.26 |
| 19830-002 | 6 | 93 | 11 | 07/19/10 10:23:12 | 13.56 | 7.85 | 7.69 | 48016 | 31.28 |
| 19830-009 | 6 | 94 | 11 | 07/19/10 10:23:26 | 13.58 | 7.71 | 7.72 | 48019 | 31.28 |
| 19830-013 | 6 | 95 | 11 | 07/19/10 10:23:37 | 13.58 | 7.61 | 7.73 | 48007 | 31.27 |
| 19830-004 | 6 | 96 | 11 | 07/19/10 10:23:59 | 13.47 | 7.76 | 7.75 | 47997 | 31.26 |
| 19830-012 | 6 | 97 | 11 | 07/19/10 10:24:45 | 12.96 | 8.14 | 7.73 | 48063 | 31.29 |
| 19830-015 | 6 | 98 | 11 | 07/19/10 10:25:16 | 12.99 | 7.93 | 7.75 | 48059 | 31.29 |
| 19830-014 | 6 | 99 | 11 | 07/19/10 10:25:38 | 12.91 | 7.81 | 7.73 | 48063 | 31.29 |
| 19830-003 | 6 | 100 | 11 | 07/19/10 10:25:59 | 12.78 | 7.91 | 7.70 | 48062 | 31.28 |
| 19830-010 | 6 | 101 | 11 | 07/19/10 10:26:18 | 12.76 | 8.20 | 7.74 | 48113 | 31.32 |
| 19830-000 | 6 | 102 | 11 | 07/19/10 10:26:43 | 12.91 | 8.32 | 7.73 | 48094 | 31.31 |
| 19830-016 | 6 | 103 | 11 | 07/19/10 10:27:08 | 12.83 | 8.17 | 7.76 | 48092 | 31.31 |
| 19830-001 | 6 | 104 | 11 | 07/19/10 10:27:29 | 12.55 | 8.21 | 7.79 | 48070 | 31.28 |
| 19830-017 | 6 | 105 | 11 | 07/19/10 10:27:47 | 12.36 | 8.38 | 7.74 | 48067 | 31.27 |
| 19830-008 | 6 | 106 | 11 | 07/19/10 10:28:05 | 12.37 | 8.43 | 7.78 | 48120 | 31.31 |
| 19830-011 | 6 | 107 | 11 | 07/19/10 10:28:27 | 12.54 | 8.16 | 7.77 | 48132 | 31.33 |
| 19830-006 | 6 | 108 | 11 | 07/19/10 10:28:48 | 12.73 | 7.97 | 7.65 | 48139 | 31.34 |
| 19830-015 | 7 | 109 | 11 | 07/19/10 10:29:08 | 12.89 | 8.04 | 7.70 | 48161 | 31.36 |
| 19830-017 | 7 | 110 | 11 | 07/19/10 10:29:28 | 13.08 | 8.04 | 7.71 | 48139 | 31.35 |
| 19830-003 | 7 | 111 | 11 | 07/19/10 10:29:48 | 13.25 | 8.07 | 7.73 | 48092 | 31.32 |
| 19830-008 | 7 | 112 | 11 | 07/19/10 10:30:10 | 13.26 | 8.24 | 7.79 | 48088 | 31.32 |
| 19830-006 | 7 | 113 | 11 | 07/19/10 10:30:39 | 13.65 | 8.20 | 7.68 | 47946 | 31.23 |
| 19830-012 | 7 | 114 | 11 | 07/19/10 10:31:08 | 13.79 | 8.16 | 7.76 | 48007 | 31.28 |
| 19830-004 | 7 | 115 | 11 | 07/19/10 10:31:25 | 13.86 | 8.11 | 7.77 | 47981 | 31.26 |
| 19830-011 | 7 | 116 | 11 | 07/19/10 10:31:41 | 13.93 | 8.06 | 7.73 | 47978 | 31.26 |
| 19830-014 | 7 | 117 | 11 | 07/19/10 10:32:19 | 13.84 | 8.12 | 7.79 | 47732 | 31.08 |
| 19830-005 | 7 | 118 | 11 | 07/19/10 10:32:37 | 13.75 | 8.11 | 7.69 | 47945 | 31.23 |
| 19830-001 | 7 | 119 | 11 | 07/19/10 10:32:53 | 13.43 | 8.05 | 7.70 | 47926 | 31.21 |
| 19830-000 | 7 | 120 | 11 | 07/19/10 10:33:09 | 13.44 | 8.15 | 7.73 | 47991 | 31.26 |
| 19830-009 | 7 | 121 | 11 | 07/19/10 10:33:32 | 13.05 | 8.25 | 7.78 | 48000 | 31.25 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 122 | 11 | 07/19/10 10:33:48 | 13.23 | 7.98 | 7.72 | 48087 | 31.32 |
| 19830-007 | 7 | 123 | 11 | 07/19/10 10:34:02 | 13.25 | 7.87 | 7.67 | 48012 | 31.27 |
| 19830-002 | 7 | 124 | 11 | 07/19/10 10:34:16 | 13.26 | 7.75 | 7.72 | 48055 | 31.30 |
| 19830-013 | 7 | 125 | 11 | 07/19/10 10:34:35 | 13.25 | 7.91 | 7.77 | 48089 | 31.32 |
| 19830-016 | 7 | 126 | 11 | 07/19/10 10:34:47 | 13.46 | 8.04 | 7.74 | 48137 | 31.36 |
| 19830-017 | 8 | 127 | 11 | 07/19/10 10:35:05 | 13.67 | 7.85 | 7.72 | 48035 | 31.30 |
| 19830-013 | 8 | 128 | 11 | 07/19/10 10:35:21 | 13.66 | 7.85 | 7.72 | 47991 | 31.26 |
| 19830-010 | 8 | 129 | 11 | 07/19/10 10:35:59 | 13.58 | 8.15 | 7.81 | 48009 | 31.27 |
| 19830-007 | 8 | 130 | 11 | 07/19/10 10:36:20 | 13.83 | 8.11 | 7.68 | 47772 | 31.11 |
| 19830-011 | 8 | 131 | 11 | 07/19/10 10:36:44 | 13.59 | 7.64 | 7.67 | 47984 | 31.26 |
| 19830-002 | 8 | 132 | 11 | 07/19/10 10:37:06 | 13.67 | 7.20 | 7.75 | 48000 | 31.27 |
| 19830-004 | 8 | 133 | 11 | 07/19/10 10:37:24 | 13.85 | 7.29 | 7.74 | 47998 | 31.27 |
| 19830-003 | 8 | 134 | 11 | 07/19/10 10:37:52 | 13.76 | 7.93 | 7.75 | 47897 | 31.20 |
| 19830-005 | 8 | 135 | 11 | 07/19/10 10:38:11 | 13.55 | 7.86 | 7.59 | 47961 | 31.24 |
| 19830-012 | 8 | 136 | 11 | 07/19/10 10:38:33 | 13.24 | 7.59 | 7.73 | 47978 | 31.24 |
| 19830-006 | 8 | 137 | 11 | 07/19/10 10:38:59 | 13.07 | 7.70 | 7.60 | 48032 | 31.27 |
| 19830-001 | 8 | 138 | 11 | 07/19/10 10:39:28 | 13.18 | 7.98 | 7.72 | 48029 | 31.28 |
| 19830-014 | 8 | 139 | 11 | 07/19/10 10:39:53 | 13.41 | 7.93 | 7.79 | 48034 | 31.29 |
| 19830-000 | 8 | 140 | 11 | 07/19/10 10:40:12 | 13.49 | 8.04 | 7.79 | 48019 | 31.28 |
| 19830-009 | 8 | 141 | 11 | 07/19/10 10:40:29 | 13.44 | 8.30 | 7.72 | 47878 | 31.17 |
| 19830-008 | 8 | 142 | 11 | 07/19/10 10:40:41 | 13.42 | 8.25 | 7.79 | 48015 | 31.27 |
| 19830-015 | 8 | 143 | 11 | 07/19/10 10:40:59 | 13.48 | 8.17 | 7.71 | 47992 | 31.26 |
| 19830-016 | 8 | 144 | 11 | 07/19/10 10:41:22 | 13.55 | 7.92 | 7.66 | 47966 | 31.24 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 12 | 07/20/10 14:41:56 | 13.78 | 8.76 | 7.82 | 48074 | 31.33 |
| 19830-016 | 1 | 2 | 12 | 07/20/10 14:42:37 | 13.91 | 8.19 | 7.81 | 47631 | 31.01 |
| 19830-015 | 1 | 3 | 12 | 07/20/10 14:42:46 | 13.89 | 8.04 | 7.78 | 48055 | 31.32 |
| 19830-017 | 1 | 4 | 12 | 07/20/10 14:42:59 | 13.81 | 8.02 | 7.73 | 48012 | 31.28 |
| 19830-001 | 1 | 5 | 12 | 07/20/10 14:43:14 | 13.52 | 8.00 | 7.79 | 47984 | 31.25 |
| 19830-011 | 1 | 6 | 12 | 07/20/10 14:43:26 | 13.56 | 7.96 | 7.77 | 48162 | 31.38 |
| 19830-014 | 1 | 7 | 12 | 07/20/10 14:43:35 | 13.60 | 7.90 | 7.77 | 48174 | 31.39 |
| 19830-009 | 1 | 8 | 12 | 07/20/10 14:43:52 | 13.45 | 7.55 | 7.75 | 48014 | 31.27 |
| 19830-012 | 1 | 9 | 12 | 07/20/10 14:44:05 | 13.46 | 7.20 | 7.76 | 48080 | 31.32 |
| 19830-010 | 1 | 10 | 12 | 07/20/10 14:44:19 | 13.43 | 7.04 | 7.76 | 48085 | 31.32 |
| 19830-008 | 1 | 11 | 12 | 07/20/10 14:44:31 | 13.53 | 7.33 | 7.85 | 48106 | 31.34 |
| 19830-006 | 1 | 12 | 12 | 07/20/10 14:44:42 | 13.60 | 7.49 | 7.80 | 48059 | 31.31 |
| 19830-004 | 1 | 13 | 12 | 07/20/10 14:44:57 | 13.37 | 7.44 | 7.73 | 48006 | 31.26 |
| 19830-013 | 1 | 14 | 12 | 07/20/10 14:45:10 | 13.30 | 7.67 | 7.77 | 48091 | 31.32 |
| 19830-000 | 1 | 15 | 12 | 07/20/10 14:45:23 | 13.29 | 7.77 | 7.76 | 48080 | 31.32 |
| 19830-005 | 1 | 16 | 12 | 07/20/10 14:45:35 | 13.18 | 8.02 | 7.77 | 48014 | 31.26 |
| 19830-007 | 1 | 17 | 12 | 07/20/10 14:45:48 | 13.08 | 8.09 | 7.73 | 48076 | 31.31 |
| 19830-003 | 1 | 18 | 12 | 07/20/10 14:45:59 | 13.02 | 8.18 | 7.70 | 48104 | 31.32 |
| 19830-009 | 2 | 19 | 12 | 07/20/10 14:46:30 | 13.66 | 7.40 | 7.79 | 48072 | 31.32 |
| 19830-016 | 2 | 20 | 12 | 07/20/10 14:46:46 | 13.79 | 7.04 | 7.76 | 48089 | 31.34 |
| 19830-007 | 2 | 21 | 12 | 07/20/10 14:46:58 | 13.94 | 6.75 | 7.66 | 48047 | 31.31 |
| 19830-015 | 2 | 22 | 12 | 07/20/10 14:47:10 | 13.95 | 6.78 | 7.65 | 48011 | 31.29 |
| 19830-008 | 2 | 23 | 12 | 07/20/10 14:47:32 | 14.02 | 7.46 | 7.82 | 48020 | 31.30 |
| 19830-002 | 2 | 24 | 12 | 07/20/10 14:47:41 | 14.08 | 7.59 | 7.81 | 48106 | 31.36 |
| 19830-012 | 2 | 25 | 12 | 07/20/10 14:47:51 | 14.01 | 7.36 | 7.76 | 47912 | 31.22 |
| 19830-004 | 2 | 26 | 12 | 07/20/10 14:47:59 | 13.89 | 7.26 | 7.74 | 47820 | 31.15 |
| 19830-000 | 2 | 27 | 12 | 07/20/10 14:48:10 | 13.67 | 7.40 | 7.73 | 47951 | 31.23 |
| 19830-003 | 2 | 28 | 12 | 07/20/10 14:48:24 | 13.67 | 7.81 | 7.72 | 47990 | 31.26 |
| 19830-011 | 2 | 29 | 12 | 07/20/10 14:48:36 | 13.60 | 7.91 | 7.71 | 47983 | 31.26 |
| 19830-017 | 2 | 30 | 12 | 07/20/10 14:48:47 | 13.64 | 7.79 | 7.70 | 48123 | 31.36 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-014 | 2 | 31 | 12 | 07/20/10 14:48:57 | 13.63 | 7.69 | 7.73 | 48021 | 31.28 |
| 19830-001 | 2 | 32 | 12 | 07/20/10 14:49:10 | 13.49 | 7.47 | 7.74 | 47967 | 31.24 |
| 19830-013 | 2 | 33 | 12 | 07/20/10 14:49:30 | 13.37 | 7.43 | 7.77 | 48062 | 31.30 |
| 19830-010 | 2 | 34 | 12 | 07/20/10 14:49:45 | 13.41 | 7.56 | 7.77 | 48051 | 31.30 |
| 19830-006 | 2 | 35 | 12 | 07/20/10 14:49:59 | 13.32 | 7.79 | 7.75 | 48426 | 31.57 |
| 19830-005 | 2 | 36 | 12 | 07/20/10 14:50:14 | 13.73 | 7.62 | 7.65 | 48177 | 31.40 |
| 19830-013 | 3 | 37 | 12 | 07/20/10 14:50:25 | 13.77 | 7.29 | 7.65 | 48076 | 31.33 |
| 19830-009 | 3 | 38 | 12 | 07/20/10 14:50:34 | 13.80 | 7.12 | 7.71 | 48063 | 31.32 |
| 19830-017 | 3 | 39 | 12 | 07/20/10 14:50:46 | 13.88 | 7.27 | 7.68 | 48079 | 31.33 |
| 19830-016 | 3 | 40 | 12 | 07/20/10 14:51:06 | 13.72 | 7.26 | 7.68 | 48038 | 31.30 |
| 19830-000 | 3 | 41 | 12 | 07/20/10 14:51:20 | 13.90 | 7.63 | 7.74 | 48068 | 31.33 |
| 19830-010 | 3 | 42 | 12 | 07/20/10 14:51:32 | 13.83 | 7.97 | 7.73 | 47911 | 31.21 |
| 19830-008 | 3 | 43 | 12 | 07/20/10 14:51:46 | 13.35 | 8.05 | 7.72 | 47970 | 31.24 |
| 19830-014 | 3 | 44 | 12 | 07/20/10 14:51:59 | 13.56 | 7.80 | 7.75 | 48198 | 31.41 |
| 19830-004 | 3 | 45 | 12 | 07/20/10 14:52:13 | 13.58 | 7.61 | 7.72 | 48032 | 31.29 |
| 19830-006 | 3 | 46 | 12 | 07/20/10 14:52:29 | 13.64 | 7.40 | 7.66 | 48034 | 31.29 |
| 19830-005 | 3 | 47 | 12 | 07/20/10 14:52:38 | 13.64 | 7.26 | 7.64 | 47999 | 31.27 |
| 19830-011 | 3 | 48 | 12 | 07/20/10 14:52:52 | 13.26 | 7.49 | 7.71 | 47991 | 31.25 |
| 19830-002 | 3 | 49 | 12 | 07/20/10 14:53:06 | 13.48 | 7.47 | 7.75 | 48181 | 31.40 |
| 19830-012 | 3 | 50 | 12 | 07/20/10 14:53:20 | 13.45 | 7.30 | 7.74 | 47993 | 31.26 |
| 19830-001 | 3 | 51 | 12 | 07/20/10 14:53:36 | 12.87 | 7.37 | 7.76 | 47914 | 31.18 |
| 19830-003 | 3 | 52 | 12 | 07/20/10 14:53:46 | 12.79 | 7.65 | 7.79 | 48190 | 31.38 |
| 19830-007 | 3 | 53 | 12 | 07/20/10 14:53:58 | 12.94 | 7.91 | 7.67 | 48210 | 31.40 |
| 19830-015 | 3 | 54 | 12 | 07/20/10 14:54:09 | 13.05 | 7.69 | 7.68 | 48159 | 31.36 |
| 19830-006 | 4 | 55 | 12 | 07/20/10 14:54:16 | 13.01 | 7.75 | 7.69 | 48030 | 31.27 |
| 19830-011 | 4 | 56 | 12 | 07/20/10 14:54:27 | 13.01 | 7.84 | 7.72 | 48190 | 31.39 |
| 19830-012 | 4 | 57 | 12 | 07/20/10 14:54:36 | 13.04 | 7.82 | 7.77 | 48126 | 31.34 |
| 19830-010 | 4 | 58 | 12 | 07/20/10 14:54:47 | 12.90 | 8.01 | 7.78 | 47977 | 31.23 |
| 19830-015 | 4 | 59 | 12 | 07/20/10 14:54:58 | 12.58 | 8.14 | 7.75 | 47939 | 31.19 |
| 19830-009 | 4 | 60 | 12 | 07/20/10 14:55:09 | 12.44 | 8.04 | 7.76 | 48184 | 31.36 |
| 19830-001 | 4 | 61 | 12 | 07/20/10 14:55:18 | 12.44 | 8.07 | 7.73 | 48220 | 31.38 |
| 19830-016 | 4 | 62 | 12 | 07/20/10 14:55:33 | 12.85 | 7.83 | 7.68 | 48312 | 31.47 |
| 19830-008 | 4 | 63 | 12 | 07/20/10 14:55:46 | 13.02 | 7.65 | 7.74 | 48211 | 31.40 |
| 19830-004 | 4 | 64 | 12 | 07/20/10 14:55:55 | 13.08 | 7.71 | 7.73 | 48241 | 31.42 |
| 19830-007 | 4 | 65 | 12 | 07/20/10 14:56:11 | 12.84 | 7.66 | 7.63 | 47991 | 31.23 |
| 19830-014 | 4 | 66 | 12 | 07/20/10 14:56:25 | 13.01 | 7.52 | 7.63 | 48204 | 31.40 |
| 19830-000 | 4 | 67 | 12 | 07/20/10 14:56:36 | 13.10 | 7.18 | 7.65 | 48198 | 31.39 |
| 19830-017 | 4 | 68 | 12 | 07/20/10 14:56:48 | 13.21 | 7.30 | 7.65 | 48152 | 31.37 |
| 19830-013 | 4 | 69 | 12 | 07/20/10 14:57:04 | 13.36 | 7.31 | 7.70 | 48096 | 31.33 |
| 19830-002 | 4 | 70 | 12 | 07/20/10 14:57:13 | 13.35 | 7.42 | 7.72 | 48053 | 31.30 |
| 19830-005 | 4 | 71 | 12 | 07/20/10 14:57:26 | 13.30 | 7.52 | 7.71 | 48029 | 31.28 |
| 19830-003 | 4 | 72 | 12 | 07/20/10 14:57:42 | 13.02 | 7.70 | 7.71 | 48001 | 31.25 |
| 19830-016 | 5 | 73 | 12 | 07/20/10 14:57:57 | 13.01 | 7.80 | 7.68 | 48114 | 31.33 |
| 19830-003 | 5 | 74 | 12 | 07/20/10 14:58:10 | 13.16 | 7.61 | 7.66 | 48165 | 31.37 |
| 19830-000 | 5 | 75 | 12 | 07/20/10 14:58:22 | 13.43 | 7.42 | 7.68 | 48185 | 31.40 |
| 19830-013 | 5 | 76 | 12 | 07/20/10 14:58:33 | 13.56 | 7.51 | 7.68 | 48106 | 31.34 |
| 19830-001 | 5 | 77 | 12 | 07/20/10 14:58:46 | 13.61 | 7.50 | 7.64 | 48078 | 31.32 |
| 19830-002 | 5 | 78 | 12 | 07/20/10 14:58:58 | 13.69 | 7.61 | 7.66 | 48112 | 31.35 |
| 19830-004 | 5 | 79 | 12 | 07/20/10 14:59:08 | 13.68 | 7.37 | 7.65 | 48004 | 31.27 |
| 19830-012 | 5 | 80 | 12 | 07/20/10 14:59:25 | 13.52 | 7.46 | 7.76 | 48005 | 31.27 |
| 19830-005 | 5 | 81 | 12 | 07/20/10 14:59:44 | 12.90 | 7.90 | 7.74 | 47998 | 31.24 |
| 19830-011 | 5 | 82 | 12 | 07/20/10 14:59:56 | 13.01 | 7.60 | 7.73 | 48234 | 31.42 |
| 19830-010 | 5 | 83 | 12 | 07/20/10 15:00:04 | 13.06 | 7.53 | 7.75 | 48130 | 31.34 |
| 19830-017 | 5 | 84 | 12 | 07/20/10 15:00:15 | 13.21 | 7.57 | 7.71 | 48165 | 31.37 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 5 | 85 | 12 | 07/20/10 15:00:28 | 13.24 | 7.27 | 7.65 | 48052 | 31.29 |
| 19830-006 | 5 | 86 | 12 | 07/20/10 15:00:42 | 13.27 | 7.35 | 7.60 | 48122 | 31.35 |
| 19830-008 | 5 | 87 | 12 | 07/20/10 15:00:55 | 13.37 | 7.41 | 7.67 | 48118 | 31.35 |
| 19830-007 | 5 | 88 | 12 | 07/20/10 15:01:07 | 13.11 | 7.73 | 7.68 | 47911 | 31.19 |
| 19830-014 | 5 | 89 | 12 | 07/20/10 15:01:22 | 12.86 | 7.99 | 7.70 | 48078 | 31.30 |
| 19830-015 | 5 | 90 | 12 | 07/20/10 15:01:30 | 12.92 | 7.91 | 7.70 | 48253 | 31.43 |
| 19830-005 | 6 | 91 | 12 | 07/20/10 15:01:39 | 13.08 | 7.84 | 7.72 | 48298 | 31.47 |
| 19830-007 | 6 | 92 | 12 | 07/20/10 15:01:51 | 13.25 | 7.81 | 7.69 | 48102 | 31.33 |
| 19830-002 | 6 | 93 | 12 | 07/20/10 15:02:03 | 13.35 | 7.75 | 7.69 | 48124 | 31.35 |
| 19830-009 | 6 | 94 | 12 | 07/20/10 15:02:14 | 13.39 | 7.62 | 7.73 | 48072 | 31.31 |
| 19830-013 | 6 | 95 | 12 | 07/20/10 15:02:24 | 13.40 | 7.43 | 7.75 | 48090 | 31.33 |
| 19830-004 | 6 | 96 | 12 | 07/20/10 15:02:36 | 13.29 | 7.58 | 7.75 | 48024 | 31.27 |
| 19830-012 | 6 | 97 | 12 | 07/20/10 15:03:12 | 12.73 | 8.03 | 7.75 | 47977 | 31.22 |
| 19830-015 | 6 | 98 | 12 | 07/20/10 15:03:19 | 12.72 | 7.98 | 7.74 | 48133 | 31.33 |
| 19830-014 | 6 | 99 | 12 | 07/20/10 15:03:28 | 12.68 | 7.93 | 7.73 | 48105 | 31.31 |
| 19830-003 | 6 | 100 | 12 | 07/20/10 15:03:38 | 12.57 | 7.88 | 7.71 | 48088 | 31.29 |
| 19830-010 | 6 | 101 | 12 | 07/20/10 15:03:46 | 12.53 | 7.92 | 7.73 | 48205 | 31.38 |
| 19830-000 | 6 | 102 | 12 | 07/20/10 15:03:58 | 12.61 | 8.10 | 7.75 | 48235 | 31.40 |
| 19830-016 | 6 | 103 | 12 | 07/20/10 15:04:09 | 12.60 | 8.21 | 7.75 | 48165 | 31.35 |
| 19830-001 | 6 | 104 | 12 | 07/20/10 15:04:21 | 12.39 | 8.17 | 7.77 | 48028 | 31.24 |
| 19830-017 | 6 | 105 | 12 | 07/20/10 15:04:33 | 12.13 | 8.27 | 7.75 | 48115 | 31.30 |
| 19830-008 | 6 | 106 | 12 | 07/20/10 15:04:41 | 12.09 | 8.27 | 7.78 | 48209 | 31.36 |
| 19830-011 | 6 | 107 | 12 | 07/20/10 15:04:51 | 12.18 | 8.29 | 7.80 | 48395 | 31.50 |
| 19830-006 | 6 | 108 | 12 | 07/20/10 15:05:00 | 12.36 | 8.11 | 7.76 | 48406 | 31.52 |
| 19830-015 | 7 | 109 | 12 | 07/20/10 15:05:07 | 12.51 | 8.00 | 7.72 | 48472 | 31.57 |
| 19830-017 | 7 | 110 | 12 | 07/20/10 15:05:16 | 12.71 | 7.95 | 7.72 | 48433 | 31.55 |
| 19830-003 | 7 | 111 | 12 | 07/20/10 15:05:29 | 13.00 | 7.95 | 7.74 | 48277 | 31.45 |
| 19830-008 | 7 | 112 | 12 | 07/20/10 15:05:41 | 13.08 | 7.97 | 7.77 | 48204 | 31.40 |
| 19830-006 | 7 | 113 | 12 | 07/20/10 15:05:59 | 13.41 | 8.10 | 7.74 | 48169 | 31.38 |
| 19830-012 | 7 | 114 | 12 | 07/20/10 15:06:11 | 13.66 | 8.00 | 7.72 | 48152 | 31.38 |
| 19830-004 | 7 | 115 | 12 | 07/20/10 15:06:20 | 13.77 | 7.92 | 7.74 | 48053 | 31.31 |
| 19830-011 | 7 | 116 | 12 | 07/20/10 15:06:36 | 13.89 | 7.79 | 7.72 | 48021 | 31.29 |
| 19830-014 | 7 | 117 | 12 | 07/20/10 15:06:53 | 13.79 | 7.62 | 7.78 | 48004 | 31.28 |
| 19830-005 | 7 | 118 | 12 | 07/20/10 15:07:03 | 13.71 | 7.80 | 7.75 | 47919 | 31.21 |
| 19830-001 | 7 | 119 | 12 | 07/20/10 15:07:13 | 13.47 | 7.89 | 7.72 | 47884 | 31.18 |
| 19830-000 | 7 | 120 | 12 | 07/20/10 15:07:33 | 13.30 | 8.06 | 7.74 | 47995 | 31.25 |
| 19830-009 | 7 | 121 | 12 | 07/20/10 15:07:45 | 12.96 | 8.26 | 7.79 | 47928 | 31.19 |
| 19830-010 | 7 | 122 | 12 | 07/20/10 15:07:54 | 12.96 | 8.11 | 7.79 | 48229 | 31.41 |
| 19830-007 | 7 | 123 | 12 | 07/20/10 15:08:06 | 13.03 | 7.92 | 7.69 | 48098 | 31.32 |
| 19830-002 | 7 | 124 | 12 | 07/20/10 15:08:18 | 13.06 | 7.67 | 7.72 | 48165 | 31.37 |
| 19830-013 | 7 | 125 | 12 | 07/20/10 15:08:29 | 13.08 | 7.59 | 7.75 | 48217 | 31.41 |
| 19830-016 | 7 | 126 | 12 | 07/20/10 15:08:42 | 13.31 | 7.73 | 7.72 | 48220 | 31.42 |
| 19830-017 | 8 | 127 | 12 | 07/20/10 15:08:58 | 13.53 | 7.69 | 7.73 | 48132 | 31.36 |
| 19830-013 | 8 | 128 | 12 | 07/20/10 15:09:08 | 13.54 | 7.66 | 7.72 | 48048 | 31.30 |
| 19830-010 | 8 | 129 | 12 | 07/20/10 15:09:28 | 13.46 | 7.89 | 7.82 | 48083 | 31.32 |
| 19830-007 | 8 | 130 | 12 | 07/20/10 15:09:40 | 13.64 | 7.96 | 7.74 | 48128 | 31.36 |
| 19830-011 | 8 | 131 | 12 | 07/20/10 15:10:00 | 13.47 | 7.55 | 7.67 | 48040 | 31.29 |
| 19830-002 | 8 | 132 | 12 | 07/20/10 15:10:11 | 13.50 | 7.14 | 7.72 | 48155 | 31.38 |
| 19830-004 | 8 | 133 | 12 | 07/20/10 15:10:20 | 13.65 | 6.98 | 7.76 | 48190 | 31.41 |
| 19830-003 | 8 | 134 | 12 | 07/20/10 15:10:31 | 13.67 | 7.28 | 7.77 | 48023 | 31.29 |
| 19830-005 | 8 | 135 | 12 | 07/20/10 15:10:42 | 13.50 | 7.64 | 7.70 | 47871 | 31.17 |
| 19830-012 | 8 | 136 | 12 | 07/20/10 15:10:57 | 13.08 | 7.55 | 7.72 | 47950 | 31.21 |
| 19830-006 | 8 | 137 | 12 | 07/20/10 15:11:09 | 12.89 | 7.44 | 7.70 | 48023 | 31.26 |
| 19830-001 | 8 | 138 | 12 | 07/20/10 15:11:22 | 12.96 | 7.53 | 7.70 | 48163 | 31.36 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-014 | 8 | 139 | 12 | 07/20/10 15:11:36 | 13.14 | 7.70 | 7.77 | 48198 | 31.40 |
| 19830-000 | 8 | 140 | 12 | 07/20/10 15:11:48 | 13.26 | 7.69 | 7.78 | 48156 | 31.37 |
| 19830-009 | 8 | 141 | 12 | 07/20/10 15:11:58 | 13.29 | 7.92 | 7.78 | 48084 | 31.32 |
| 19830-008 | 8 | 142 | 12 | 07/20/10 15:12:06 | 13.27 | 8.02 | 7.81 | 48098 | 31.33 |
| 19830-015 | 8 | 143 | 12 | 07/20/10 15:12:16 | 13.27 | 8.07 | 7.81 | 48212 | 31.41 |
| 19830-016 | 8 | 144 | 12 | 07/20/10 15:12:24 | 13.35 | 8.01 | 7.75 | 48188 | 31.40 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 13 | 07/21/10 12:15:00 | 12.45 | 8.51 | 7.75 | 46782 | 30.35 |
| 19830-016 | 1 | 2 | 13 | 07/21/10 12:15:49 | 12.41 | 8.10 | 7.70 | 43172 | 27.76 |
| 19830-015 | 1 | 3 | 13 | 07/21/10 12:16:10 | 12.27 | 7.93 | 7.60 | 46719 | 30.29 |
| 19830-017 | 1 | 4 | 13 | 07/21/10 12:16:40 | 12.27 | 7.73 | 7.51 | 46755 | 30.32 |
| 19830-001 | 1 | 5 | 13 | 07/21/10 12:17:09 | 12.30 | 7.53 | 7.72 | 46788 | 30.35 |
| 19830-011 | 1 | 6 | 13 | 07/21/10 12:17:20 | 12.29 | 7.54 | 7.70 | 46754 | 30.32 |
| 19830-014 | 1 | 7 | 13 | 07/21/10 12:18:02 | 12.25 | 6.89 | 7.53 | 46786 | 30.34 |
| 19830-009 | 1 | 8 | 13 | 07/21/10 12:18:32 | 12.16 | 6.90 | 7.60 | 46863 | 30.39 |
| 19830-012 | 1 | 9 | 13 | 07/21/10 12:19:20 | 12.22 | 5.50 | 7.73 | 46835 | 30.38 |
| 19830-010 | 1 | 10 | 13 | 07/21/10 12:20:10 | 12.07 | 8.23 | 7.77 | 46814 | 30.35 |
| 19830-008 | 1 | 11 | 13 | 07/21/10 12:20:27 | 12.01 | 8.31 | 7.87 | 46764 | 30.32 |
| 19830-006 | 1 | 12 | 13 | 07/21/10 12:21:03 | 12.01 | 7.42 | 7.55 | 46761 | 30.31 |
| 19830-004 | 1 | 13 | 13 | 07/21/10 12:21:33 | 12.03 | 7.67 | 7.60 | 46820 | 30.36 |
| 19830-013 | 1 | 14 | 13 | 07/21/10 12:21:49 | 12.01 | 7.87 | 7.67 | 46810 | 30.35 |
| 19830-000 | 1 | 15 | 13 | 07/21/10 12:22:22 | 11.97 | 8.37 | 7.69 | 46774 | 30.32 |
| 19830-005 | 1 | 16 | 13 | 07/21/10 12:22:37 | 11.93 | 8.50 | 7.71 | 46889 | 30.40 |
| 19830-007 | 1 | 17 | 13 | 07/21/10 12:22:55 | 11.92 | 8.26 | 7.61 | 46899 | 30.41 |
| 19830-003 | 1 | 18 | 13 | 07/21/10 12:23:21 | 12.04 | 8.32 | 7.60 | 46908 | 30.42 |
| 19830-009 | 2 | 19 | 13 | 07/21/10 12:24:06 | 12.22 | 7.23 | 7.67 | 46748 | 30.31 |
| 19830-016 | 2 | 20 | 13 | 07/21/10 12:24:43 | 12.24 | 6.32 | 7.66 | 46749 | 30.31 |
| 19830-007 | 2 | 21 | 13 | 07/21/10 12:25:09 | 12.28 | 6.47 | 7.39 | 46502 | 30.14 |
| 19830-015 | 2 | 22 | 13 | 07/21/10 12:25:48 | 12.24 | 7.77 | 7.61 | 46723 | 30.30 |
| 19830-008 | 2 | 23 | 13 | 07/21/10 12:26:06 | 12.26 | 8.01 | 7.81 | 46671 | 30.26 |
| 19830-002 | 2 | 24 | 13 | 07/21/10 12:26:18 | 12.25 | 8.11 | 7.81 | 46733 | 30.30 |
| 19830-012 | 2 | 25 | 13 | 07/21/10 12:26:36 | 12.19 | 7.75 | 7.70 | 46088 | 29.84 |
| 19830-004 | 2 | 26 | 13 | 07/21/10 12:26:48 | 12.18 | 7.67 | 7.62 | 46644 | 30.24 |
| 19830-000 | 2 | 27 | 13 | 07/21/10 12:27:23 | 12.03 | 8.36 | 7.67 | 46605 | 30.20 |
| 19830-003 | 2 | 28 | 13 | 07/21/10 12:27:37 | 12.00 | 8.46 | 7.65 | 46174 | 29.89 |
| 19830-011 | 2 | 29 | 13 | 07/21/10 12:27:55 | 11.99 | 8.22 | 7.65 | 46743 | 30.30 |
| 19830-017 | 2 | 30 | 13 | 07/21/10 12:28:11 | 11.99 | 7.97 | 7.58 | 46675 | 30.25 |
| 19830-014 | 2 | 31 | 13 | 07/21/10 12:28:27 | 11.95 | 7.85 | 7.65 | 46790 | 30.33 |
| 19830-001 | 2 | 32 | 13 | 07/21/10 12:28:45 | 11.90 | 7.45 | 7.63 | 46739 | 30.29 |
| 19830-013 | 2 | 33 | 13 | 07/21/10 12:29:03 | 11.90 | 7.41 | 7.67 | 46861 | 30.38 |
| 19830-010 | 2 | 34 | 13 | 07/21/10 12:29:22 | 11.96 | 7.76 | 7.72 | 46790 | 30.33 |
| 19830-006 | 2 | 35 | 13 | 07/21/10 12:29:49 | 12.24 | 7.84 | 7.58 | 46783 | 30.34 |
| 19830-005 | 2 | 36 | 13 | 07/21/10 12:30:10 | 12.22 | 7.52 | 7.51 | 46771 | 30.33 |
| 19830-013 | 3 | 37 | 13 | 07/21/10 12:30:31 | 12.20 | 7.17 | 7.52 | 46852 | 30.39 |
| 19830-009 | 3 | 38 | 13 | 07/21/10 12:31:09 | 12.30 | 7.84 | 7.70 | 46768 | 30.33 |
| 19830-017 | 3 | 39 | 13 | 07/21/10 12:31:54 | 12.34 | 6.54 | 7.33 | 46635 | 30.24 |
| 19830-016 | 3 | 40 | 13 | 07/21/10 12:32:40 | 12.21 | 7.86 | 7.60 | 46810 | 30.36 |
| 19830-000 | 3 | 41 | 13 | 07/21/10 12:33:06 | 12.20 | 8.34 | 7.71 | 46686 | 30.27 |
| 19830-010 | 3 | 42 | 13 | 07/21/10 12:33:30 | 12.19 | 8.29 | 7.63 | 46697 | 30.28 |
| 19830-008 | 3 | 43 | 13 | 07/21/10 12:33:51 | 12.12 | 8.08 | 7.69 | 46747 | 30.31 |
| 19830-014 | 3 | 44 | 13 | 07/21/10 12:34:05 | 12.10 | 8.01 | 7.68 | 46713 | 30.28 |
| 19830-004 | 3 | 45 | 13 | 07/21/10 12:34:18 | 12.00 | 7.84 | 7.63 | 46503 | 30.13 |
| 19830-006 | 3 | 46 | 13 | 07/21/10 12:34:31 | 12.04 | 7.71 | 7.54 | 46725 | 30.29 |
| 19830-005 | 3 | 47 | 13 | 07/21/10 12:35:04 | 12.05 | 7.73 | 7.65 | 46705 | 30.28 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 3 | 48 | 13 | 07/21/10 12:35:23 | 11.77 | 7.98 | 7.71 | 46981 | 30.46 |
| 19830-002 | 3 | 49 | 13 | 07/21/10 12:35:40 | 11.90 | 7.95 | 7.70 | 46757 | 30.31 |
| 19830-012 | 3 | 50 | 13 | 07/21/10 12:36:25 | 12.04 | 6.59 | 7.60 | 46719 | 30.29 |
| 19830-001 | 3 | 51 | 13 | 07/21/10 12:37:05 | 11.82 | 7.82 | 7.78 | 46810 | 30.34 |
| 19830-003 | 3 | 52 | 13 | 07/21/10 12:37:25 | 11.83 | 8.21 | 7.78 | 46766 | 30.31 |
| 19830-007 | 3 | 53 | 13 | 07/21/10 12:38:10 | 11.87 | 7.30 | 7.43 | 46706 | 30.27 |
| 19830-015 | 3 | 54 | 13 | 07/21/10 12:38:49 | 11.89 | 8.16 | 7.72 | 46702 | 30.27 |
| 19830-006 | 4 | 55 | 13 | 07/21/10 12:39:15 | 11.82 | 8.09 | 7.63 | 46707 | 30.27 |
| 19830-011 | 4 | 56 | 13 | 07/21/10 12:39:39 | 11.78 | 8.02 | 7.76 | 46796 | 30.33 |
| 19830-012 | 4 | 57 | 13 | 07/21/10 12:40:00 | 11.73 | 8.31 | 7.87 | 46801 | 30.33 |
| 19830-010 | 4 | 58 | 13 | 07/21/10 12:40:23 | 11.64 | 8.50 | 7.82 | 46807 | 30.33 |
| 19830-015 | 4 | 59 | 13 | 07/21/10 12:40:45 | 11.49 | 8.36 | 7.72 | 46820 | 30.33 |
| 19830-009 | 4 | 60 | 13 | 07/21/10 12:41:07 | 11.45 | 8.29 | 7.83 | 46866 | 30.36 |
| 19830-001 | 4 | 61 | 13 | 07/21/10 12:41:29 | 11.51 | 8.25 | 7.66 | 46927 | 30.41 |
| 19830-016 | 4 | 62 | 13 | 07/21/10 12:41:53 | 11.73 | 7.84 | 7.58 | 46720 | 30.27 |
| 19830-008 | 4 | 63 | 13 | 07/21/10 12:42:18 | 11.90 | 8.06 | 7.84 | 46805 | 30.34 |
| 19830-004 | 4 | 64 | 13 | 07/21/10 12:42:42 | 12.05 | 8.09 | 7.71 | 46791 | 30.34 |
| 19830-007 | 4 | 65 | 13 | 07/21/10 12:43:03 | 11.84 | 8.03 | 7.56 | 46690 | 30.26 |
| 19830-014 | 4 | 66 | 13 | 07/21/10 12:43:27 | 11.81 | 7.52 | 7.59 | 46742 | 30.29 |
| 19830-000 | 4 | 67 | 13 | 07/21/10 12:43:50 | 11.79 | 7.67 | 7.62 | 46708 | 30.27 |
| 19830-017 | 4 | 68 | 13 | 07/21/10 12:44:15 | 11.79 | 7.63 | 7.49 | 46733 | 30.28 |
| 19830-013 | 4 | 69 | 13 | 07/21/10 12:44:39 | 11.82 | 7.73 | 7.61 | 46712 | 30.27 |
| 19830-002 | 4 | 70 | 13 | 07/21/10 12:45:01 | 11.82 | 7.95 | 7.68 | 46733 | 30.29 |
| 19830-005 | 4 | 71 | 13 | 07/21/10 12:45:20 | 11.83 | 7.89 | 7.64 | 46689 | 30.25 |
| 19830-003 | 4 | 72 | 13 | 07/21/10 12:45:33 | 11.82 | 7.90 | 7.65 | 46675 | 30.24 |
| 19830-016 | 5 | 73 | 13 | 07/21/10 12:45:48 | 11.79 | 8.04 | 7.64 | 46697 | 30.26 |
| 19830-003 | 5 | 74 | 13 | 07/21/10 12:46:27 | 11.83 | 7.03 | 7.50 | 46712 | 30.27 |
| 19830-000 | 5 | 75 | 13 | 07/21/10 12:47:07 | 11.92 | 8.13 | 7.69 | 46624 | 30.21 |
| 19830-013 | 5 | 76 | 13 | 07/21/10 12:47:29 | 11.97 | 7.99 | 7.60 | 46664 | 30.24 |
| 19830-001 | 5 | 77 | 13 | 07/21/10 12:47:50 | 12.03 | 7.88 | 7.57 | 46427 | 30.07 |
| 19830-002 | 5 | 78 | 13 | 07/21/10 12:48:10 | 12.13 | 7.85 | 7.66 | 46681 | 30.26 |
| 19830-004 | 5 | 79 | 13 | 07/21/10 12:48:29 | 12.18 | 7.64 | 7.64 | 46670 | 30.26 |
| 19830-012 | 5 | 80 | 13 | 07/21/10 12:48:52 | 12.21 | 7.97 | 7.77 | 46676 | 30.26 |
| 19830-005 | 5 | 81 | 13 | 07/21/10 12:49:08 | 11.93 | 8.29 | 7.73 | 46601 | 30.20 |
| 19830-011 | 5 | 82 | 13 | 07/21/10 12:49:26 | 11.82 | 7.95 | 7.69 | 46696 | 30.26 |
| 19830-010 | 5 | 83 | 13 | 07/21/10 12:49:38 | 11.79 | 7.98 | 7.74 | 46755 | 30.30 |
| 19830-017 | 5 | 84 | 13 | 07/21/10 12:50:09 | 11.85 | 7.38 | 7.56 | 46612 | 30.20 |
| 19830-009 | 5 | 85 | 13 | 07/21/10 12:50:31 | 11.81 | 7.43 | 7.68 | 46761 | 30.31 |
| 19830-006 | 5 | 86 | 13 | 07/21/10 12:50:58 | 11.82 | 7.72 | 7.51 | 46794 | 30.33 |
| 19830-008 | 5 | 87 | 13 | 07/21/10 12:51:11 | 11.86 | 7.73 | 7.61 | 46734 | 30.29 |
| 19830-007 | 5 | 88 | 13 | 07/21/10 12:51:30 | 11.85 | 8.14 | 7.62 | 46705 | 30.27 |
| 19830-014 | 5 | 89 | 13 | 07/21/10 12:51:47 | 11.79 | 8.24 | 7.66 | 46716 | 30.27 |
| 19830-015 | 5 | 90 | 13 | 07/21/10 12:52:03 | 11.79 | 8.16 | 7.70 | 46733 | 30.28 |
| 19830-005 | 6 | 91 | 13 | 07/21/10 12:52:18 | 11.83 | 8.11 | 7.73 | 46709 | 30.27 |
| 19830-007 | 6 | 92 | 13 | 07/21/10 12:52:32 | 11.87 | 8.12 | 7.66 | 46726 | 30.28 |
| 19830-002 | 6 | 93 | 13 | 07/21/10 12:52:46 | 11.95 | 8.12 | 7.65 | 46753 | 30.31 |
| 19830-009 | 6 | 94 | 13 | 07/21/10 12:53:01 | 12.02 | 7.92 | 7.72 | 46712 | 30.28 |
| 19830-013 | 6 | 95 | 13 | 07/21/10 12:53:14 | 12.04 | 7.74 | 7.75 | 46748 | 30.31 |
| 19830-004 | 6 | 96 | 13 | 07/21/10 12:53:29 | 12.08 | 7.93 | 7.73 | 46777 | 30.33 |
| 19830-012 | 6 | 97 | 13 | 07/21/10 12:53:55 | 11.78 | 8.40 | 7.74 | 46906 | 30.41 |
| 19830-015 | 6 | 98 | 13 | 07/21/10 12:54:07 | 11.67 | 8.41 | 7.74 | 46850 | 30.36 |
| 19830-014 | 6 | 99 | 13 | 07/21/10 12:54:23 | 11.60 | 8.18 | 7.75 | 46966 | 30.44 |
| 19830-003 | 6 | 100 | 13 | 07/21/10 12:54:34 | 11.57 | 8.12 | 7.75 | 47071 | 30.52 |
| 19830-010 | 6 | 101 | 13 | 07/21/10 12:54:45 | 11.58 | 8.23 | 7.76 | 47030 | 30.49 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 6 | 102 | 13 | 07/21/10 12:55:00 | 11.56 | 8.48 | 7.77 | 46959 | 30.44 |
| 19830-016 | 6 | 103 | 13 | 07/21/10 12:55:11 | 11.55 | 8.60 | 7.74 | 47017 | 30.48 |
| 19830-001 | 6 | 104 | 13 | 07/21/10 12:55:27 | 11.55 | 8.39 | 7.77 | 47028 | 30.49 |
| 19830-017 | 6 | 105 | 13 | 07/21/10 12:55:41 | 11.49 | 8.46 | 7.77 | 46925 | 30.41 |
| 19830-008 | 6 | 106 | 13 | 07/21/10 12:55:53 | 11.48 | 8.57 | 7.83 | 46948 | 30.42 |
| 19830-011 | 6 | 107 | 13 | 07/21/10 12:56:08 | 11.55 | 8.55 | 7.81 | 46983 | 30.45 |
| 19830-006 | 6 | 108 | 13 | 07/21/10 12:56:24 | 11.71 | 8.23 | 7.72 | 46999 | 30.47 |
| 19830-015 | 7 | 109 | 13 | 07/21/10 12:56:38 | 11.85 | 8.23 | 7.70 | 47065 | 30.53 |
| 19830-017 | 7 | 110 | 13 | 07/21/10 12:56:50 | 12.00 | 8.16 | 7.72 | 47089 | 30.55 |
| 19830-003 | 7 | 111 | 13 | 07/21/10 12:57:02 | 12.11 | 8.18 | 7.73 | 47071 | 30.54 |
| 19830-008 | 7 | 112 | 13 | 07/21/10 12:57:14 | 12.23 | 8.21 | 7.79 | 47067 | 30.54 |
| 19830-006 | 7 | 113 | 13 | 07/21/10 12:57:31 | 12.08 | 8.48 | 7.76 | 46667 | 30.25 |
| 19830-012 | 7 | 114 | 13 | 07/21/10 12:57:42 | 12.03 | 8.47 | 7.75 | 46682 | 30.26 |
| 19830-004 | 7 | 115 | 13 | 07/21/10 12:57:55 | 11.95 | 8.45 | 7.76 | 46725 | 30.29 |
| 19830-011 | 7 | 116 | 13 | 07/21/10 12:58:10 | 11.90 | 8.39 | 7.71 | 46685 | 30.25 |
| 19830-014 | 7 | 117 | 13 | 07/21/10 12:58:25 | 11.84 | 8.43 | 7.75 | 41051 | 26.24 |
| 19830-005 | 7 | 118 | 13 | 07/21/10 12:58:40 | 11.82 | 8.37 | 7.67 | 46675 | 30.24 |
| 19830-001 | 7 | 119 | 13 | 07/21/10 12:58:57 | 11.78 | 8.27 | 7.68 | 46735 | 30.29 |
| 19830-000 | 7 | 120 | 13 | 07/21/10 12:59:15 | 11.78 | 8.43 | 7.75 | 46672 | 30.24 |
| 19830-009 | 7 | 121 | 13 | 07/21/10 12:59:33 | 11.59 | 8.59 | 7.82 | 46821 | 30.34 |
| 19830-010 | 7 | 122 | 13 | 07/21/10 12:59:51 | 11.56 | 8.34 | 7.76 | 46855 | 30.36 |
| 19830-007 | 7 | 123 | 13 | 07/21/10 13:00:09 | 11.61 | 8.18 | 7.59 | 46831 | 30.35 |
| 19830-002 | 7 | 124 | 13 | 07/21/10 13:00:28 | 11.70 | 7.85 | 7.72 | 46894 | 30.40 |
| 19830-013 | 7 | 125 | 13 | 07/21/10 13:00:46 | 11.76 | 7.96 | 7.76 | 46947 | 30.44 |
| 19830-016 | 7 | 126 | 13 | 07/21/10 13:01:05 | 11.94 | 8.14 | 7.68 | 46865 | 30.39 |
| 19830-017 | 8 | 127 | 13 | 07/21/10 13:01:23 | 12.07 | 8.07 | 7.67 | 46828 | 30.36 |
| 19830-013 | 8 | 128 | 13 | 07/21/10 13:01:39 | 12.22 | 8.03 | 7.64 | 46864 | 30.40 |
| 19830-010 | 8 | 129 | 13 | 07/21/10 13:02:00 | 12.09 | 8.30 | 7.81 | 45893 | 29.69 |
| 19830-007 | 8 | 130 | 13 | 07/21/10 13:02:19 | 12.05 | 8.39 | 7.70 | 46658 | 30.24 |
| 19830-011 | 8 | 131 | 13 | 07/21/10 13:02:39 | 11.93 | 7.96 | 7.62 | 46778 | 30.32 |
| 19830-002 | 8 | 132 | 13 | 07/21/10 13:02:59 | 11.93 | 7.37 | 7.71 | 46401 | 30.05 |
| 19830-004 | 8 | 133 | 13 | 07/21/10 13:03:20 | 11.96 | 7.61 | 7.69 | 46720 | 30.28 |
| 19830-003 | 8 | 134 | 13 | 07/21/10 13:03:41 | 11.89 | 8.15 | 7.80 | 46755 | 30.30 |
| 19830-005 | 8 | 135 | 13 | 07/21/10 13:04:02 | 11.82 | 8.01 | 7.55 | 46744 | 30.29 |
| 19830-012 | 8 | 136 | 13 | 07/21/10 13:04:23 | 11.74 | 7.69 | 7.67 | 46810 | 30.34 |
| 19830-006 | 8 | 137 | 13 | 07/21/10 13:04:44 | 11.73 | 7.76 | 7.58 | 46845 | 30.36 |
| 19830-001 | 8 | 138 | 13 | 07/21/10 13:05:03 | 11.71 | 7.89 | 7.67 | 46931 | 30.42 |
| 19830-014 | 8 | 139 | 13 | 07/21/10 13:05:21 | 11.76 | 8.11 | 7.77 | 46880 | 30.39 |
| 19830-000 | 8 | 140 | 13 | 07/21/10 13:05:40 | 11.83 | 8.25 | 7.77 | 46840 | 30.36 |
| 19830-009 | 8 | 141 | 13 | 07/21/10 13:05:58 | 11.89 | 8.50 | 7.82 | 46915 | 30.42 |
| 19830-008 | 8 | 142 | 13 | 07/21/10 13:06:17 | 11.97 | 8.42 | 7.89 | 46863 | 30.39 |
| 19830-015 | 8 | 143 | 13 | 07/21/10 13:06:36 | 12.07 | 8.32 | 7.78 | 46877 | 30.40 |
| 19830-016 | 8 | 144 | 13 | 07/21/10 13:06:55 | 12.25 | 8.08 | 7.60 | 46861 | 30.40 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 14 | 07/22/10 09:38:21 | 12.49 | 8.29 | 7.64 | 47694 | 31.01 |
| 19830-016 | 1 | 2 | 14 | 07/22/10 09:39:08 | 12.33 | 8.44 | 7.60 | 44452 | 28.67 |
| 19830-015 | 1 | 3 | 14 | 07/22/10 09:39:24 | 12.28 | 8.23 | 7.54 | 47648 | 30.97 |
| 19830-017 | 1 | 4 | 14 | 07/22/10 09:39:35 | 12.29 | 8.19 | 7.48 | 47674 | 30.98 |
| 19830-001 | 1 | 5 | 14 | 07/22/10 09:39:58 | 12.31 | 7.91 | 7.64 | 47724 | 31.02 |
| 19830-011 | 1 | 6 | 14 | 07/22/10 09:40:18 | 12.29 | 8.00 | 7.59 | 47620 | 30.94 |
| 19830-014 | 1 | 7 | 14 | 07/22/10 09:40:49 | 12.25 | 7.62 | 7.50 | 47686 | 30.99 |
| 19830-009 | 1 | 8 | 14 | 07/22/10 09:41:06 | 12.18 | 7.25 | 7.54 | 47733 | 31.02 |
| 19830-012 | 1 | 9 | 14 | 07/22/10 09:41:25 | 12.21 | 7.01 | 7.64 | 47761 | 31.04 |
| 19830-010 | 1 | 10 | 14 | 07/22/10 09:41:58 | 12.09 | 7.69 | 7.63 | 47739 | 31.02 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 1 | 11 | 14 | 07/22/10 09:42:12 | 12.03 | 8.02 | 7.73 | 47691 | 30.98 |
| 19830-006 | 1 | 12 | 14 | 07/22/10 09:42:51 | 12.02 | 6.56 | 7.23 | 47630 | 30.94 |
| 19830-004 | 1 | 13 | 14 | 07/22/10 09:43:15 | 12.03 | 7.21 | 7.46 | 47738 | 31.02 |
| 19830-013 | 1 | 14 | 14 | 07/22/10 09:43:31 | 12.02 | 7.89 | 7.55 | 47730 | 31.01 |
| 19830-000 | 1 | 15 | 14 | 07/22/10 09:43:42 | 11.98 | 8.06 | 7.58 | 47685 | 30.98 |
| 19830-005 | 1 | 16 | 14 | 07/22/10 09:43:57 | 11.94 | 8.12 | 7.61 | 47751 | 31.02 |
| 19830-007 | 1 | 17 | 14 | 07/22/10 09:44:12 | 11.93 | 8.39 | 7.55 | 47768 | 31.04 |
| 19830-003 | 1 | 18 | 14 | 07/22/10 09:44:38 | 12.03 | 8.49 | 7.54 | 47800 | 31.06 |
| 19830-009 | 2 | 19 | 14 | 07/22/10 09:45:02 | 12.27 | 6.65 | 7.42 | 47724 | 31.02 |
| 19830-016 | 2 | 20 | 14 | 07/22/10 09:46:55 | 12.36 | 6.60 | 7.60 | 47594 | 30.93 |
| 19830-007 | 2 | 21 | 14 | 07/22/10 09:47:14 | 12.36 | 7.04 | 7.41 | 47339 | 30.74 |
| 19830-015 | 2 | 22 | 14 | 07/22/10 09:47:33 | 12.31 | 7.51 | 7.50 | 47598 | 30.93 |
| 19830-008 | 2 | 23 | 14 | 07/22/10 09:47:49 | 12.27 | 8.04 | 7.68 | 47630 | 30.95 |
| 19830-002 | 2 | 24 | 14 | 07/22/10 09:48:03 | 12.24 | 8.19 | 7.70 | 47678 | 30.98 |
| 19830-012 | 2 | 25 | 14 | 07/22/10 09:48:15 | 12.18 | 7.94 | 7.65 | 47574 | 30.91 |
| 19830-004 | 2 | 26 | 14 | 07/22/10 09:48:29 | 12.20 | 7.91 | 7.54 | 47670 | 30.98 |
| 19830-000 | 2 | 27 | 14 | 07/22/10 09:48:47 | 12.06 | 8.15 | 7.56 | 47587 | 30.91 |
| 19830-003 | 2 | 28 | 14 | 07/22/10 09:49:00 | 12.01 | 8.52 | 7.57 | 47311 | 30.71 |
| 19830-011 | 2 | 29 | 14 | 07/22/10 09:49:14 | 11.99 | 8.52 | 7.57 | 47696 | 30.99 |
| 19830-017 | 2 | 30 | 14 | 07/22/10 09:49:26 | 12.01 | 8.31 | 7.53 | 47643 | 30.95 |
| 19830-014 | 2 | 31 | 14 | 07/22/10 09:49:39 | 11.96 | 8.21 | 7.49 | 47713 | 31.00 |
| 19830-001 | 2 | 32 | 14 | 07/22/10 09:49:54 | 11.90 | 7.87 | 7.56 | 47735 | 31.01 |
| 19830-013 | 2 | 33 | 14 | 07/22/10 09:50:05 | 11.90 | 7.69 | 7.56 | 47781 | 31.04 |
| 19830-010 | 2 | 34 | 14 | 07/22/10 09:50:21 | 11.97 | 7.89 | 7.62 | 47690 | 30.98 |
| 19830-006 | 2 | 35 | 14 | 07/22/10 09:50:40 | 12.24 | 8.02 | 7.54 | 47812 | 31.08 |
| 19830-005 | 2 | 36 | 14 | 07/22/10 09:51:00 | 12.32 | 7.66 | 7.42 | 47670 | 30.98 |
| 19830-013 | 3 | 37 | 14 | 07/22/10 09:51:15 | 12.28 | 7.30 | 7.38 | 47727 | 31.02 |
| 19830-009 | 3 | 38 | 14 | 07/22/10 09:51:32 | 12.36 | 7.17 | 7.54 | 47676 | 30.99 |
| 19830-017 | 3 | 39 | 14 | 07/22/10 09:51:46 | 12.35 | 7.66 | 7.42 | 47601 | 30.93 |
| 19830-016 | 3 | 40 | 14 | 07/22/10 09:51:59 | 12.25 | 7.37 | 7.39 | 47714 | 31.01 |
| 19830-000 | 3 | 41 | 14 | 07/22/10 09:52:07 | 12.24 | 7.58 | 7.47 | 47654 | 30.97 |
| 19830-010 | 3 | 42 | 14 | 07/22/10 09:52:24 | 12.28 | 8.22 | 7.53 | 47619 | 30.94 |
| 19830-008 | 3 | 43 | 14 | 07/22/10 09:52:40 | 12.17 | 8.35 | 7.58 | 47695 | 30.99 |
| 19830-014 | 3 | 44 | 14 | 07/22/10 09:52:52 | 12.12 | 8.32 | 7.61 | 47642 | 30.95 |
| 19830-004 | 3 | 45 | 14 | 07/22/10 09:53:08 | 12.02 | 8.19 | 7.55 | 47605 | 30.92 |
| 19830-006 | 3 | 46 | 14 | 07/22/10 09:53:25 | 12.07 | 7.98 | 7.45 | 47644 | 30.95 |
| 19830-005 | 3 | 47 | 14 | 07/22/10 09:53:36 | 12.07 | 7.61 | 7.48 | 47603 | 30.92 |
| 19830-011 | 3 | 48 | 14 | 07/22/10 09:53:49 | 11.86 | 7.87 | 7.58 | 47755 | 31.02 |
| 19830-002 | 3 | 49 | 14 | 07/22/10 09:54:01 | 11.88 | 8.08 | 7.59 | 47699 | 30.98 |
| 19830-012 | 3 | 50 | 14 | 07/22/10 09:54:13 | 11.98 | 7.99 | 7.52 | 47685 | 30.98 |
| 19830-001 | 3 | 51 | 14 | 07/22/10 09:54:40 | 11.85 | 7.55 | 7.53 | 47763 | 31.03 |
| 19830-003 | 3 | 52 | 14 | 07/22/10 09:55:00 | 11.78 | 8.35 | 7.66 | 47781 | 31.04 |
| 19830-007 | 3 | 53 | 14 | 07/22/10 09:55:13 | 11.80 | 8.64 | 7.54 | 47728 | 31.00 |
| 19830-015 | 3 | 54 | 14 | 07/22/10 09:55:27 | 11.78 | 8.22 | 7.55 | 47730 | 31.00 |
| 19830-006 | 4 | 55 | 14 | 07/22/10 09:55:40 | 11.75 | 8.39 | 7.57 | 47693 | 30.97 |
| 19830-011 | 4 | 56 | 14 | 07/22/10 09:55:54 | 11.68 | 8.49 | 7.60 | 47805 | 31.05 |
| 19830-012 | 4 | 57 | 14 | 07/22/10 09:56:08 | 11.61 | 8.59 | 7.73 | 47813 | 31.05 |
| 19830-010 | 4 | 58 | 14 | 07/22/10 09:56:21 | 11.57 | 8.79 | 7.75 | 47812 | 31.05 |
| 19830-015 | 4 | 59 | 14 | 07/22/10 09:56:35 | 11.48 | 8.81 | 7.64 | 47785 | 31.03 |
| 19830-009 | 4 | 60 | 14 | 07/22/10 09:56:48 | 11.40 | 8.63 | 7.68 | 47883 | 31.09 |
| 19830-001 | 4 | 61 | 14 | 07/22/10 09:57:00 | 11.45 | 8.70 | 7.63 | 47981 | 31.17 |
| 19830-016 | 4 | 62 | 14 | 07/22/10 09:57:11 | 11.61 | 8.43 | 7.53 | 47877 | 31.10 |
| 19830-008 | 4 | 63 | 14 | 07/22/10 09:57:23 | 11.77 | 8.21 | 7.64 | 47932 | 31.15 |
| 19830-004 | 4 | 64 | 14 | 07/22/10 09:57:37 | 11.94 | 8.45 | 7.69 | 47883 | 31.12 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-007 | 4 | 65 | 14 | 07/22/10 09:57:57 | 11.79 | 8.35 | 7.48 | 47705 | 30.98 |
| 19830-014 | 4 | 66 | 14 | 07/22/10 09:58:13 | 11.74 | 8.03 | 7.45 | 47725 | 31.00 |
| 19830-000 | 4 | 67 | 14 | 07/22/10 09:58:22 | 11.72 | 7.84 | 7.47 | 47684 | 30.97 |
| 19830-017 | 4 | 68 | 14 | 07/22/10 09:58:33 | 11.70 | 7.93 | 7.43 | 47721 | 30.99 |
| 19830-013 | 4 | 69 | 14 | 07/22/10 09:58:44 | 11.69 | 7.88 | 7.45 | 47722 | 30.99 |
| 19830-002 | 4 | 70 | 14 | 07/22/10 09:58:53 | 11.69 | 7.99 | 7.53 | 47743 | 31.01 |
| 19830-005 | 4 | 71 | 14 | 07/22/10 09:59:06 | 11.69 | 8.18 | 7.57 | 47719 | 30.99 |
| 19830-003 | 4 | 72 | 14 | 07/22/10 09:59:15 | 11.71 | 8.19 | 7.58 | 47746 | 31.01 |
| 19830-016 | 5 | 73 | 14 | 07/22/10 09:59:26 | 11.71 | 8.30 | 7.55 | 47716 | 30.99 |
| 19830-003 | 5 | 74 | 14 | 07/22/10 09:59:39 | 11.69 | 8.23 | 7.48 | 47758 | 31.02 |
| 19830-000 | 5 | 75 | 14 | 07/22/10 09:59:49 | 11.72 | 8.04 | 7.50 | 47714 | 30.99 |
| 19830-013 | 5 | 76 | 14 | 07/22/10 10:00:01 | 11.80 | 8.16 | 7.50 | 47696 | 30.98 |
| 19830-001 | 5 | 77 | 14 | 07/22/10 10:00:13 | 11.84 | 8.21 | 7.49 | 47742 | 31.01 |
| 19830-002 | 5 | 78 | 14 | 07/22/10 10:00:28 | 11.96 | 8.25 | 7.52 | 47722 | 31.00 |
| 19830-004 | 5 | 79 | 14 | 07/22/10 10:00:42 | 12.03 | 7.97 | 7.51 | 47726 | 31.01 |
| 19830-012 | 5 | 80 | 14 | 07/22/10 10:00:55 | 12.11 | 7.97 | 7.60 | 47735 | 31.02 |
| 19830-005 | 5 | 81 | 14 | 07/22/10 10:01:10 | 11.87 | 8.37 | 7.61 | 47638 | 30.94 |
| 19830-011 | 5 | 82 | 14 | 07/22/10 10:01:21 | 11.76 | 8.20 | 7.58 | 47668 | 30.96 |
| 19830-010 | 5 | 83 | 14 | 07/22/10 10:01:34 | 11.68 | 8.16 | 7.64 | 47782 | 31.03 |
| 19830-017 | 5 | 84 | 14 | 07/22/10 10:01:44 | 11.67 | 8.28 | 7.59 | 47703 | 30.98 |
| 19830-009 | 5 | 85 | 14 | 07/22/10 10:01:53 | 11.69 | 8.04 | 7.53 | 47791 | 31.04 |
| 19830-006 | 5 | 86 | 14 | 07/22/10 10:02:05 | 11.73 | 7.84 | 7.49 | 47765 | 31.02 |
| 19830-008 | 5 | 87 | 14 | 07/22/10 10:02:17 | 11.75 | 7.94 | 7.55 | 47713 | 30.99 |
| 19830-007 | 5 | 88 | 14 | 07/22/10 10:02:28 | 11.76 | 8.20 | 7.56 | 47717 | 30.99 |
| 19830-014 | 5 | 89 | 14 | 07/22/10 10:02:42 | 11.73 | 8.43 | 7.55 | 47753 | 31.02 |
| 19830-015 | 5 | 90 | 14 | 07/22/10 10:02:52 | 11.73 | 8.41 | 7.57 | 47747 | 31.01 |
| 19830-005 | 6 | 91 | 14 | 07/22/10 10:03:00 | 11.74 | 8.37 | 7.59 | 47722 | 30.99 |
| 19830-007 | 6 | 92 | 14 | 07/22/10 10:03:10 | 11.77 | 8.38 | 7.57 | 47724 | 31.00 |
| 19830-002 | 6 | 93 | 14 | 07/22/10 10:03:26 | 11.85 | 8.32 | 7.52 | 47760 | 31.03 |
| 19830-009 | 6 | 94 | 14 | 07/22/10 10:03:50 | 11.92 | 7.98 | 7.62 | 47723 | 31.00 |
| 19830-013 | 6 | 95 | 14 | 07/22/10 10:04:00 | 11.91 | 7.92 | 7.64 | 47840 | 31.09 |
| 19830-004 | 6 | 96 | 14 | 07/22/10 10:04:09 | 11.98 | 8.04 | 7.63 | 47858 | 31.10 |
| 19830-012 | 6 | 97 | 14 | 07/22/10 10:04:27 | 11.85 | 8.37 | 7.63 | 47764 | 31.03 |
| 19830-015 | 6 | 98 | 14 | 07/22/10 10:04:40 | 11.73 | 8.55 | 7.65 | 47716 | 30.99 |
| 19830-014 | 6 | 99 | 14 | 07/22/10 10:04:51 | 11.67 | 8.45 | 7.63 | 47811 | 31.06 |
| 19830-003 | 6 | 100 | 14 | 07/22/10 10:05:04 | 11.64 | 8.40 | 7.62 | 47917 | 31.13 |
| 19830-010 | 6 | 101 | 14 | 07/22/10 10:05:14 | 11.65 | 8.50 | 7.65 | 47905 | 31.12 |
| 19830-000 | 6 | 102 | 14 | 07/22/10 10:05:25 | 11.64 | 8.67 | 7.68 | 47811 | 31.05 |
| 19830-016 | 6 | 103 | 14 | 07/22/10 10:05:34 | 11.62 | 8.81 | 7.65 | 47887 | 31.11 |
| 19830-001 | 6 | 104 | 14 | 07/22/10 10:05:42 | 11.62 | 8.76 | 7.65 | 47904 | 31.12 |
| 19830-017 | 6 | 105 | 14 | 07/22/10 10:05:52 | 11.57 | 8.69 | 7.66 | 47801 | 31.04 |
| 19830-008 | 6 | 106 | 14 | 07/22/10 10:06:00 | 11.56 | 8.73 | 7.71 | 47829 | 31.06 |
| 19830-011 | 6 | 107 | 14 | 07/22/10 10:06:10 | 11.59 | 8.82 | 7.72 | 47939 | 31.14 |
| 19830-006 | 6 | 108 | 14 | 07/22/10 10:06:18 | 11.68 | 8.73 | 7.66 | 48062 | 31.24 |
| 19830-015 | 7 | 109 | 14 | 07/22/10 10:06:28 | 11.87 | 8.58 | 7.64 | 48045 | 31.23 |
| 19830-017 | 7 | 110 | 14 | 07/22/10 10:06:37 | 12.02 | 8.50 | 7.64 | 48024 | 31.23 |
| 19830-003 | 7 | 111 | 14 | 07/22/10 10:06:46 | 12.15 | 8.49 | 7.64 | 47952 | 31.18 |
| 19830-008 | 7 | 112 | 14 | 07/22/10 10:06:59 | 12.28 | 8.54 | 7.69 | 47939 | 31.17 |
| 19830-006 | 7 | 113 | 14 | 07/22/10 10:07:12 | 12.14 | 8.76 | 7.69 | 47551 | 30.89 |
| 19830-012 | 7 | 114 | 14 | 07/22/10 10:07:22 | 12.05 | 8.77 | 7.65 | 47593 | 30.91 |
| 19830-004 | 7 | 115 | 14 | 07/22/10 10:07:34 | 11.97 | 8.75 | 7.66 | 47609 | 30.92 |
| 19830-011 | 7 | 116 | 14 | 07/22/10 10:07:42 | 11.94 | 8.74 | 7.65 | 47573 | 30.90 |
| 19830-014 | 7 | 117 | 14 | 07/22/10 10:08:04 | 11.85 | 8.66 | 7.67 | 47314 | 30.71 |
| 19830-005 | 7 | 118 | 14 | 07/22/10 10:08:13 | 11.85 | 8.69 | 7.61 | 47580 | 30.90 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-001 | 7 | 119 | 14 | 07/22/10 10:08:23 | 11.85 | 8.62 | 7.58 | 47686 | 30.97 |
| 19830-000 | 7 | 120 | 14 | 07/22/10 10:08:32 | 11.84 | 8.55 | 7.61 | 47568 | 30.89 |
| 19830-009 | 7 | 121 | 14 | 07/22/10 10:08:43 | 11.70 | 8.69 | 7.67 | 47666 | 30.95 |
| 19830-010 | 7 | 122 | 14 | 07/22/10 10:08:53 | 11.63 | 8.72 | 7.68 | 47720 | 30.99 |
| 19830-007 | 7 | 123 | 14 | 07/22/10 10:09:03 | 11.65 | 8.62 | 7.59 | 47746 | 31.01 |
| 19830-002 | 7 | 124 | 14 | 07/22/10 10:09:15 | 11.70 | 8.41 | 7.57 | 47865 | 31.10 |
| 19830-013 | 7 | 125 | 14 | 07/22/10 10:09:31 | 11.79 | 8.30 | 7.61 | 47890 | 31.12 |
| 19830-016 | 7 | 126 | 14 | 07/22/10 10:09:42 | 11.91 | 8.45 | 7.57 | 47874 | 31.11 |
| 19830-017 | 8 | 127 | 14 | 07/22/10 10:09:53 | 12.07 | 8.43 | 7.55 | 47803 | 31.07 |
| 19830-013 | 8 | 128 | 14 | 07/22/10 10:10:06 | 12.23 | 8.36 | 7.58 | 47823 | 31.09 |
| 19830-010 | 8 | 129 | 14 | 07/22/10 10:10:24 | 12.13 | 8.46 | 7.68 | 47144 | 30.59 |
| 19830-007 | 8 | 130 | 14 | 07/22/10 10:10:34 | 12.09 | 8.58 | 7.62 | 47525 | 30.87 |
| 19830-011 | 8 | 131 | 14 | 07/22/10 10:10:47 | 11.96 | 8.46 | 7.54 | 47638 | 30.94 |
| 19830-002 | 8 | 132 | 14 | 07/22/10 10:10:59 | 11.91 | 8.02 | 7.59 | 47706 | 30.99 |
| 19830-004 | 8 | 133 | 14 | 07/22/10 10:11:10 | 11.93 | 7.75 | 7.58 | 47684 | 30.98 |
| 19830-003 | 8 | 134 | 14 | 07/22/10 10:11:21 | 11.93 | 7.91 | 7.61 | 47671 | 30.97 |
| 19830-005 | 8 | 135 | 14 | 07/22/10 10:11:33 | 11.89 | 8.24 | 7.52 | 47602 | 30.91 |
| 19830-012 | 8 | 136 | 14 | 07/22/10 10:11:47 | 11.83 | 7.66 | 7.44 | 47676 | 30.96 |
| 19830-006 | 8 | 137 | 14 | 07/22/10 10:12:01 | 11.76 | 7.35 | 7.48 | 47762 | 31.02 |
| 19830-001 | 8 | 138 | 14 | 07/22/10 10:12:14 | 11.75 | 7.68 | 7.53 | 47788 | 31.04 |
| 19830-014 | 8 | 139 | 14 | 07/22/10 10:12:24 | 11.77 | 7.95 | 7.58 | 47787 | 31.04 |
| 19830-000 | 8 | 140 | 14 | 07/22/10 10:12:34 | 11.83 | 7.97 | 7.61 | 47752 | 31.02 |
| 19830-009 | 8 | 141 | 14 | 07/22/10 10:12:47 | 11.90 | 8.35 | 7.66 | 47829 | 31.08 |
| 19830-008 | 8 | 142 | 14 | 07/22/10 10:12:57 | 11.97 | 8.47 | 7.70 | 47822 | 31.08 |
| 19830-015 | 8 | 143 | 14 | 07/22/10 10:13:10 | 12.07 | 8.56 | 7.68 | 47798 | 31.06 |
| 19830-016 | 8 | 144 | 14 | 07/22/10 10:13:22 | 12.24 | 8.39 | 7.52 | 47835 | 31.10 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 15 | 07/23/10 11:42:02 | 13.40 | 7.60 | 7.60 | 45640 | 29.56 |
| 19830-016 | 1 | 2 | 15 | 07/23/10 11:43:00 | 13.32 | 7.73 | 7.63 | 45528 | 29.48 |
| 19830-015 | 1 | 3 | 15 | 07/23/10 11:43:19 | 13.32 | 7.81 | 7.60 | 45631 | 29.55 |
| 19830-017 | 1 | 4 | 15 | 07/23/10 11:43:46 | 13.34 | 7.50 | 7.52 | 45619 | 29.54 |
| 19830-001 | 1 | 5 | 15 | 07/23/10 11:44:07 | 13.24 | 7.40 | 7.60 | 45662 | 29.57 |
| 19830-011 | 1 | 6 | 15 | 07/23/10 11:44:33 | 13.29 | 7.49 | 7.60 | 45635 | 29.55 |
| 19830-014 | 1 | 7 | 15 | 07/23/10 11:44:50 | 13.29 | 7.67 | 7.56 | 45632 | 29.55 |
| 19830-009 | 1 | 8 | 15 | 07/23/10 11:45:15 | 13.16 | 7.27 | 7.58 | 45641 | 29.55 |
| 19830-012 | 1 | 9 | 15 | 07/23/10 11:45:46 | 13.20 | 7.88 | 7.59 | 45593 | 29.52 |
| 19830-010 | 1 | 10 | 15 | 07/23/10 11:46:01 | 13.17 | 8.15 | 7.60 | 45655 | 29.56 |
| 19830-008 | 1 | 11 | 15 | 07/23/10 11:46:25 | 13.21 | 7.73 | 7.73 | 45624 | 29.54 |
| 19830-006 | 1 | 12 | 15 | 07/23/10 11:46:39 | 13.22 | 7.63 | 7.66 | 45615 | 29.53 |
| 19830-004 | 1 | 13 | 15 | 07/23/10 11:47:04 | 13.13 | 7.72 | 7.61 | 45648 | 29.56 |
| 19830-013 | 1 | 14 | 15 | 07/23/10 11:47:19 | 13.11 | 7.71 | 7.61 | 45667 | 29.57 |
| 19830-000 | 1 | 15 | 15 | 07/23/10 11:47:33 | 13.10 | 7.62 | 7.58 | 45653 | 29.56 |
| 19830-005 | 1 | 16 | 15 | 07/23/10 11:48:07 | 13.02 | 8.11 | 7.65 | 45652 | 29.56 |
| 19830-007 | 1 | 17 | 15 | 07/23/10 11:48:36 | 13.00 | 8.15 | 7.58 | 45671 | 29.57 |
| 19830-003 | 1 | 18 | 15 | 07/23/10 11:49:03 | 13.04 | 8.10 | 7.58 | 45670 | 29.57 |
| 19830-009 | 2 | 19 | 15 | 07/23/10 11:49:43 | 13.26 | 7.44 | 7.64 | 45618 | 29.54 |
| 19830-016 | 2 | 20 | 15 | 07/23/10 11:49:56 | 13.30 | 7.33 | 7.65 | 45650 | 29.56 |
| 19830-007 | 2 | 21 | 15 | 07/23/10 11:50:18 | 13.39 | 7.31 | 7.50 | 45581 | 29.52 |
| 19830-015 | 2 | 22 | 15 | 07/23/10 11:50:36 | 13.37 | 7.38 | 7.55 | 45614 | 29.54 |
| 19830-008 | 2 | 23 | 15 | 07/23/10 11:50:54 | 13.35 | 7.73 | 7.69 | 45632 | 29.55 |
| 19830-002 | 2 | 24 | 15 | 07/23/10 11:51:13 | 13.38 | 7.68 | 7.65 | 45628 | 29.55 |
| 19830-012 | 2 | 25 | 15 | 07/23/10 11:51:26 | 13.35 | 7.45 | 7.61 | 45596 | 29.53 |
| 19830-004 | 2 | 26 | 15 | 07/23/10 11:51:40 | 13.29 | 7.50 | 7.58 | 45601 | 29.53 |
| 19830-000 | 2 | 27 | 15 | 07/23/10 11:52:19 | 13.12 | 8.09 | 7.56 | 45641 | 29.55 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2 | 28 | 15 | 07/23/10 11:52:34 | 13.18 | 8.13 | 7.56 | 45608 | 29.53 |
| 19830-011 | 2 | 29 | 15 | 07/23/10 11:52:57 | 13.18 | 7.89 | 7.59 | 45629 | 29.54 |
| 19830-017 | 2 | 30 | 15 | 07/23/10 11:53:19 | 13.25 | 7.82 | 7.56 | 45617 | 29.54 |
| 19830-014 | 2 | 31 | 15 | 07/23/10 11:53:54 | 13.17 | 7.20 | 7.59 | 45629 | 29.54 |
| 19830-001 | 2 | 32 | 15 | 07/23/10 11:54:06 | 13.11 | 7.12 | 7.59 | 45627 | 29.54 |
| 19830-013 | 2 | 33 | 15 | 07/23/10 11:54:29 | 13.06 | 7.33 | 7.57 | 45659 | 29.56 |
| 19830-010 | 2 | 34 | 15 | 07/23/10 11:54:53 | 13.13 | 7.54 | 7.59 | 45627 | 29.54 |
| 19830-006 | 2 | 35 | 15 | 07/23/10 11:55:33 | 13.22 | 7.65 | 7.49 | 45649 | 29.56 |
| 19830-005 | 2 | 36 | 15 | 07/23/10 11:56:02 | 13.30 | 7.14 | 7.47 | 45627 | 29.55 |
| 19830-013 | 3 | 37 | 15 | 07/23/10 11:56:16 | 13.27 | 7.03 | 7.49 | 45634 | 29.55 |
| 19830-009 | 3 | 38 | 15 | 07/23/10 11:56:40 | 13.35 | 7.53 | 7.60 | 45619 | 29.54 |
| 19830-017 | 3 | 39 | 15 | 07/23/10 11:57:05 | 13.40 | 7.22 | 7.46 | 45601 | 29.53 |
| 19830-016 | 3 | 40 | 15 | 07/23/10 11:57:18 | 13.29 | 6.99 | 7.47 | 45612 | 29.53 |
| 19830-000 | 3 | 41 | 15 | 07/23/10 11:57:58 | 13.47 | 8.24 | 7.61 | 45566 | 29.51 |
| 19830-010 | 3 | 42 | 15 | 07/23/10 11:58:13 | 13.40 | 8.24 | 7.60 | 45561 | 29.50 |
| 19830-008 | 3 | 43 | 15 | 07/23/10 11:58:40 | 13.12 | 8.01 | 7.59 | 45708 | 29.60 |
| 19830-014 | 3 | 44 | 15 | 07/23/10 11:59:00 | 13.28 | 7.74 | 7.63 | 45632 | 29.55 |
| 19830-004 | 3 | 45 | 15 | 07/23/10 11:59:21 | 13.26 | 7.70 | 7.60 | 45557 | 29.49 |
| 19830-006 | 3 | 46 | 15 | 07/23/10 11:59:46 | 13.27 | 7.49 | 7.51 | 45603 | 29.53 |
| 19830-005 | 3 | 47 | 15 | 07/23/10 12:00:10 | 13.27 | 7.66 | 7.59 | 45601 | 29.53 |
| 19830-011 | 3 | 48 | 15 | 07/23/10 12:00:32 | 13.01 | 7.88 | 7.61 | 45631 | 29.54 |
| 19830-002 | 3 | 49 | 15 | 07/23/10 12:00:52 | 13.16 | 7.55 | 7.62 | 45678 | 29.58 |
| 19830-012 | 3 | 50 | 15 | 07/23/10 12:01:14 | 13.16 | 7.46 | 7.61 | 45622 | 29.54 |
| 19830-001 | 3 | 51 | 15 | 07/23/10 12:01:58 | 12.80 | 8.04 | 7.68 | 45716 | 29.59 |
| 19830-003 | 3 | 52 | 15 | 07/23/10 12:02:28 | 12.87 | 8.29 | 7.69 | 45677 | 29.57 |
| 19830-007 | 3 | 53 | 15 | 07/23/10 12:03:05 | 12.94 | 7.78 | 7.49 | 45662 | 29.56 |
| 19830-015 | 3 | 54 | 15 | 07/23/10 12:03:36 | 12.98 | 8.06 | 7.65 | 45648 | 29.55 |
| 19830-006 | 4 | 55 | 15 | 07/23/10 12:04:13 | 12.90 | 8.11 | 7.60 | 45654 | 29.55 |
| 19830-011 | 4 | 56 | 15 | 07/23/10 12:04:52 | 12.89 | 8.11 | 7.67 | 45656 | 29.55 |
| 19830-012 | 4 | 57 | 15 | 07/23/10 12:05:15 | 12.88 | 8.26 | 7.73 | 45674 | 29.57 |
| 19830-010 | 4 | 58 | 15 | 07/23/10 12:05:45 | 12.75 | 8.32 | 7.70 | 45674 | 29.56 |
| 19830-015 | 4 | 59 | 15 | 07/23/10 12:06:23 | 12.57 | 8.01 | 7.60 | 45702 | 29.58 |
| 19830-009 | 4 | 60 | 15 | 07/23/10 12:06:51 | 12.57 | 8.20 | 7.70 | 45719 | 29.59 |
| 19830-001 | 4 | 61 | 15 | 07/23/10 12:07:30 | 12.60 | 7.92 | 7.60 | 45738 | 29.60 |
| 19830-016 | 4 | 62 | 15 | 07/23/10 12:08:10 | 12.87 | 7.85 | 7.56 | 45677 | 29.57 |
| 19830-008 | 4 | 63 | 15 | 07/23/10 12:08:40 | 12.92 | 8.00 | 7.68 | 45738 | 29.61 |
| 19830-004 | 4 | 64 | 15 | 07/23/10 12:09:20 | 13.03 | 7.59 | 7.62 | 45673 | 29.57 |
| 19830-007 | 4 | 65 | 15 | 07/23/10 12:09:47 | 12.82 | 7.88 | 7.52 | 45638 | 29.54 |
| 19830-014 | 4 | 66 | 15 | 07/23/10 12:10:28 | 12.91 | 7.26 | 7.54 | 45662 | 29.56 |
| 19830-000 | 4 | 67 | 15 | 07/23/10 12:11:13 | 12.91 | 7.71 | 7.52 | 45658 | 29.56 |
| 19830-017 | 4 | 68 | 15 | 07/23/10 12:12:04 | 12.91 | 7.39 | 7.48 | 45667 | 29.56 |
| 19830-013 | 4 | 69 | 15 | 07/23/10 12:12:39 | 12.97 | 7.76 | 7.58 | 45647 | 29.55 |
| 19830-002 | 4 | 70 | 15 | 07/23/10 12:13:07 | 12.95 | 7.82 | 7.65 | 45654 | 29.55 |
| 19830-005 | 4 | 71 | 15 | 07/23/10 12:13:40 | 12.94 | 7.94 | 7.60 | 45622 | 29.53 |
| 19830-003 | 4 | 72 | 15 | 07/23/10 12:14:21 | 12.84 | 8.01 | 7.59 | 45633 | 29.54 |
| 19830-016 | 5 | 73 | 15 | 07/23/10 12:14:48 | 12.87 | 7.90 | 7.57 | 45664 | 29.56 |
| 19830-003 | 5 | 74 | 15 | 07/23/10 12:15:20 | 12.92 | 7.69 | 7.53 | 45652 | 29.55 |
| 19830-000 | 5 | 75 | 15 | 07/23/10 12:16:01 | 13.07 | 8.00 | 7.57 | 45619 | 29.53 |
| 19830-013 | 5 | 76 | 15 | 07/23/10 12:16:38 | 13.11 | 7.63 | 7.52 | 45632 | 29.54 |
| 19830-001 | 5 | 77 | 15 | 07/23/10 12:17:15 | 13.09 | 8.07 | 7.49 | 45609 | 29.53 |
| 19830-002 | 5 | 78 | 15 | 07/23/10 12:18:04 | 13.16 | 7.45 | 7.57 | 45657 | 29.56 |
| 19830-004 | 5 | 79 | 15 | 07/23/10 12:18:36 | 13.16 | 7.48 | 7.54 | 45641 | 29.55 |
| 19830-012 | 5 | 80 | 15 | 07/23/10 12:19:15 | 13.13 | 8.01 | 7.67 | 45634 | 29.55 |
| 19830-005 | 5 | 81 | 15 | 07/23/10 12:20:08 | 12.80 | 7.41 | 7.56 | 45650 | 29.55 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 5 | 82 | 15 | 07/23/10 12:20:45 | 12.88 | 7.79 | 7.61 | 45654 | 29.55 |
| 19830-010 | 5 | 83 | 15 | 07/23/10 12:21:15 | 12.85 | 7.96 | 7.68 | 45667 | 29.56 |
| 19830-017 | 5 | 84 | 15 | 07/23/10 12:21:59 | 12.92 | 6.93 | 7.46 | 45651 | 29.55 |
| 19830-009 | 5 | 85 | 15 | 07/23/10 12:22:31 | 12.87 | 7.25 | 7.60 | 45643 | 29.54 |
| 19830-006 | 5 | 86 | 15 | 07/23/10 12:23:11 | 12.79 | 7.81 | 7.51 | 45747 | 29.62 |
| 19830-008 | 5 | 87 | 15 | 07/23/10 12:23:42 | 12.99 | 8.05 | 7.64 | 45633 | 29.54 |
| 19830-007 | 5 | 88 | 15 | 07/23/10 12:26:04 | 12.84 | 8.35 | 7.53 | 45342 | 29.33 |
| 19830-014 | 5 | 89 | 15 | 07/23/10 12:26:55 | 12.76 | 8.02 | 7.61 | 45647 | 29.54 |
| 19830-015 | 5 | 90 | 15 | 07/23/10 12:27:18 | 12.81 | 8.04 | 7.65 | 45664 | 29.56 |
| 19830-005 | 6 | 91 | 15 | 07/23/10 12:27:41 | 12.89 | 8.00 | 7.63 | 45650 | 29.55 |
| 19830-007 | 6 | 92 | 15 | 07/23/10 12:28:02 | 12.91 | 8.01 | 7.58 | 45651 | 29.55 |
| 19830-002 | 6 | 93 | 15 | 07/23/10 12:28:20 | 12.95 | 7.97 | 7.59 | 45680 | 29.57 |
| 19830-009 | 6 | 94 | 15 | 07/23/10 12:28:53 | 13.01 | 7.47 | 7.64 | 45638 | 29.54 |
| 19830-013 | 6 | 95 | 15 | 07/23/10 12:29:25 | 12.99 | 7.88 | 7.67 | 45656 | 29.56 |
| 19830-004 | 6 | 96 | 15 | 07/23/10 12:29:43 | 12.96 | 7.94 | 7.68 | 45678 | 29.57 |
| 19830-012 | 6 | 97 | 15 | 07/23/10 12:30:14 | 12.75 | 8.24 | 7.67 | 45683 | 29.57 |
| 19830-015 | 6 | 98 | 15 | 07/23/10 12:30:27 | 12.70 | 8.18 | 7.66 | 45656 | 29.55 |
| 19830-014 | 6 | 99 | 15 | 07/23/10 12:30:46 | 12.64 | 8.12 | 7.67 | 45725 | 29.59 |
| 19830-003 | 6 | 100 | 15 | 07/23/10 12:31:09 | 12.59 | 8.17 | 7.64 | 45718 | 29.59 |
| 19830-010 | 6 | 101 | 15 | 07/23/10 12:32:08 | 12.58 | 8.55 | 7.72 | 45733 | 29.60 |
| 19830-000 | 6 | 102 | 15 | 07/23/10 12:32:34 | 12.66 | 8.45 | 7.65 | 45711 | 29.58 |
| 19830-016 | 6 | 103 | 15 | 07/23/10 12:32:57 | 12.60 | 8.29 | 7.67 | 45733 | 29.60 |
| 19830-001 | 6 | 104 | 15 | 07/23/10 12:33:16 | 12.51 | 8.30 | 7.71 | 45714 | 29.58 |
| 19830-017 | 6 | 105 | 15 | 07/23/10 12:33:39 | 12.40 | 8.51 | 7.69 | 45717 | 29.58 |
| 19830-008 | 6 | 106 | 15 | 07/23/10 12:33:57 | 12.39 | 8.57 | 7.74 | 45756 | 29.61 |
| 19830-011 | 6 | 107 | 15 | 07/23/10 12:34:34 | 12.51 | 8.20 | 7.70 | 45759 | 29.61 |
| 19830-006 | 6 | 108 | 15 | 07/23/10 12:34:52 | 12.60 | 8.17 | 7.64 | 45802 | 29.65 |
| 19830-015 | 7 | 109 | 15 | 07/23/10 12:35:07 | 12.70 | 8.24 | 7.64 | 45860 | 29.69 |
| 19830-017 | 7 | 110 | 15 | 07/23/10 12:35:30 | 12.85 | 8.25 | 7.67 | 45781 | 29.64 |
| 19830-003 | 7 | 111 | 15 | 07/23/10 12:35:51 | 12.95 | 8.20 | 7.63 | 45727 | 29.61 |
| 19830-008 | 7 | 112 | 15 | 07/23/10 12:36:24 | 12.98 | 8.39 | 7.70 | 45735 | 29.61 |
| 19830-006 | 7 | 113 | 15 | 07/23/10 12:36:57 | 13.13 | 8.35 | 7.61 | 45600 | 29.52 |
| 19830-012 | 7 | 114 | 15 | 07/23/10 12:37:17 | 13.17 | 8.26 | 7.65 | 45623 | 29.54 |
| 19830-004 | 7 | 115 | 15 | 07/23/10 12:37:44 | 13.17 | 8.26 | 7.69 | 45622 | 29.54 |
| 19830-011 | 7 | 116 | 15 | 07/23/10 12:38:20 | 13.19 | 7.96 | 7.66 | 45602 | 29.52 |
| 19830-014 | 7 | 117 | 15 | 07/23/10 12:40:39 | 13.09 | 8.58 | 7.72 | 45579 | 29.50 |
| 19830-005 | 7 | 118 | 15 | 07/23/10 12:41:11 | 13.09 | 8.31 | 7.60 | 45599 | 29.52 |
| 19830-001 | 7 | 119 | 15 | 07/23/10 12:41:53 | 12.95 | 8.21 | 7.72 | 45637 | 29.54 |
| 19830-000 | 7 | 120 | 15 | 07/23/10 12:42:21 | 12.94 | 8.42 | 7.66 | 45609 | 29.52 |
| 19830-009 | 7 | 121 | 15 | 07/23/10 12:43:08 | 12.65 | 7.96 | 7.71 | 45698 | 29.58 |
| 19830-010 | 7 | 122 | 15 | 07/23/10 12:43:35 | 12.75 | 7.96 | 7.63 | 45687 | 29.57 |
| 19830-007 | 7 | 123 | 15 | 07/23/10 12:43:56 | 12.76 | 7.90 | 7.54 | 45656 | 29.55 |
| 19830-002 | 7 | 124 | 15 | 07/23/10 12:44:18 | 12.77 | 7.78 | 7.63 | 45718 | 29.59 |
| 19830-013 | 7 | 125 | 15 | 07/23/10 12:44:40 | 12.79 | 7.96 | 7.64 | 45752 | 29.62 |
| 19830-016 | 7 | 126 | 15 | 07/23/10 12:45:00 | 12.95 | 8.08 | 7.59 | 45710 | 29.59 |
| 19830-017 | 8 | 127 | 15 | 07/23/10 12:45:18 | 13.05 | 7.97 | 7.59 | 45679 | 29.58 |
| 19830-013 | 8 | 128 | 15 | 07/23/10 12:45:37 | 13.07 | 7.96 | 7.61 | 45663 | 29.56 |
| 19830-010 | 8 | 129 | 15 | 07/23/10 12:46:02 | 13.09 | 8.28 | 7.70 | 45660 | 29.56 |
| 19830-007 | 8 | 130 | 15 | 07/23/10 12:46:31 | 13.18 | 8.07 | 7.57 | 45592 | 29.52 |
| 19830-011 | 8 | 131 | 15 | 07/23/10 12:47:11 | 12.98 | 7.10 | 7.60 | 45671 | 29.57 |
| 19830-002 | 8 | 132 | 15 | 07/23/10 12:47:35 | 13.07 | 7.17 | 7.66 | 45633 | 29.54 |
| 19830-004 | 8 | 133 | 15 | 07/23/10 12:48:03 | 13.18 | 7.57 | 7.61 | 45620 | 29.54 |
| 19830-003 | 8 | 134 | 15 | 07/23/10 12:48:23 | 13.15 | 7.77 | 7.61 | 45600 | 29.52 |
| 19830-005 | 8 | 135 | 15 | 07/23/10 12:49:03 | 12.96 | 6.90 | 7.40 | 45623 | 29.53 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 136 | 15 | 07/23/10 12:49:31 | 12.84 | 6.79 | 7.52 | 45624 | 29.53 |
| 19830-006 | 8 | 137 | 15 | 07/23/10 12:50:12 | 12.68 | 7.80 | 7.53 | 45367 | 29.34 |
| 19830-001 | 8 | 138 | 15 | 07/23/10 12:50:27 | 12.71 | 7.92 | 7.62 | 45732 | 29.60 |
| 19830-014 | 8 | 139 | 15 | 07/23/10 12:50:41 | 12.79 | 7.82 | 7.64 | 45736 | 29.61 |
| 19830-000 | 8 | 140 | 15 | 07/23/10 12:50:55 | 12.87 | 7.66 | 7.63 | 45680 | 29.57 |
| 19830-009 | 8 | 141 | 15 | 07/23/10 12:51:10 | 12.88 | 8.11 | 7.69 | 45689 | 29.58 |
| 19830-008 | 8 | 142 | 15 | 07/23/10 12:51:24 | 12.89 | 8.22 | 7.71 | 45692 | 29.58 |
| 19830-015 | 8 | 143 | 15 | 07/23/10 12:51:36 | 12.92 | 8.28 | 7.69 | 45734 | 29.61 |
| 19830-016 | 8 | 144 | 15 | 07/23/10 12:51:52 | 13.01 | 8.15 | 7.59 | 45717 | 29.60 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 16 | 07/24/10 09:45:00 | 13.00 | 7.84 | 7.55 | 47414 | 30.82 |
| 19830-016 | 1 | 2 | 16 | 07/24/10 09:45:38 | 12.88 | 7.66 | 7.56 | 46350 | 30.05 |
| 19830-015 | 1 | 3 | 16 | 07/24/10 09:45:52 | 12.84 | 7.70 | 7.53 | 46824 | 30.39 |
| 19830-017 | 1 | 4 | 16 | 07/24/10 09:46:08 | 12.85 | 7.53 | 7.43 | 47325 | 30.75 |
| 19830-001 | 1 | 5 | 16 | 07/24/10 09:46:23 | 12.85 | 7.07 | 7.54 | 47456 | 30.85 |
| 19830-011 | 1 | 6 | 16 | 07/24/10 09:46:40 | 12.84 | 7.22 | 7.57 | 47387 | 30.80 |
| 19830-014 | 1 | 7 | 16 | 07/24/10 09:46:51 | 12.79 | 7.36 | 7.54 | 47408 | 30.81 |
| 19830-009 | 1 | 8 | 16 | 07/24/10 09:47:26 | 12.71 | 6.25 | 7.57 | 47325 | 30.75 |
| 19830-012 | 1 | 9 | 16 | 07/24/10 09:48:39 | 12.79 | 6.15 | 7.60 | 46921 | 30.46 |
| 19830-010 | 1 | 10 | 16 | 07/24/10 09:49:04 | 12.65 | 6.98 | 7.60 | 47377 | 30.78 |
| 19830-008 | 1 | 11 | 16 | 07/24/10 09:49:22 | 12.58 | 7.10 | 7.81 | 47402 | 30.80 |
| 19830-006 | 1 | 12 | 16 | 07/24/10 09:49:57 | 12.55 | 7.74 | 7.63 | 47401 | 30.80 |
| 19830-004 | 1 | 13 | 16 | 07/24/10 09:50:13 | 12.56 | 7.90 | 7.60 | 47455 | 30.84 |
| 19830-013 | 1 | 14 | 16 | 07/24/10 09:50:30 | 12.57 | 7.52 | 7.59 | 47454 | 30.84 |
| 19830-000 | 1 | 15 | 16 | 07/24/10 09:50:46 | 12.54 | 7.17 | 7.49 | 47407 | 30.80 |
| 19830-005 | 1 | 16 | 16 | 07/24/10 09:51:00 | 12.51 | 6.76 | 7.57 | 47476 | 30.85 |
| 19830-007 | 1 | 17 | 16 | 07/24/10 09:51:25 | 12.49 | 7.81 | 7.53 | 47494 | 30.86 |
| 19830-003 | 1 | 18 | 16 | 07/24/10 09:51:44 | 12.59 | 7.92 | 7.54 | 47527 | 30.89 |
| 19830-009 | 2 | 19 | 16 | 07/24/10 09:52:02 | 12.74 | 7.94 | 7.64 | 47517 | 30.89 |
| 19830-016 | 2 | 20 | 16 | 07/24/10 09:52:35 | 12.81 | 7.15 | 7.64 | 47385 | 30.80 |
| 19830-007 | 2 | 21 | 16 | 07/24/10 09:52:54 | 12.82 | 6.89 | 7.43 | 47271 | 30.71 |
| 19830-015 | 2 | 22 | 16 | 07/24/10 09:53:09 | 12.79 | 6.78 | 7.48 | 47316 | 30.75 |
| 19830-008 | 2 | 23 | 16 | 07/24/10 09:53:30 | 12.78 | 7.46 | 7.76 | 47364 | 30.78 |
| 19830-002 | 2 | 24 | 16 | 07/24/10 09:53:48 | 12.76 | 7.45 | 7.66 | 47361 | 30.78 |
| 19830-012 | 2 | 25 | 16 | 07/24/10 09:54:04 | 12.71 | 7.16 | 7.59 | 47320 | 30.74 |
| 19830-004 | 2 | 26 | 16 | 07/24/10 09:54:16 | 12.72 | 7.06 | 7.53 | 47396 | 30.80 |
| 19830-000 | 2 | 27 | 16 | 07/24/10 09:54:45 | 12.61 | 7.62 | 7.49 | 47333 | 30.75 |
| 19830-003 | 2 | 28 | 16 | 07/24/10 09:55:03 | 12.56 | 7.85 | 7.50 | 47056 | 30.55 |
| 19830-011 | 2 | 29 | 16 | 07/24/10 09:55:17 | 12.56 | 7.76 | 7.56 | 47389 | 30.79 |
| 19830-017 | 2 | 30 | 16 | 07/24/10 09:55:36 | 12.56 | 7.52 | 7.52 | 47361 | 30.77 |
| 19830-014 | 2 | 31 | 16 | 07/24/10 09:55:58 | 12.51 | 7.18 | 7.53 | 47400 | 30.80 |
| 19830-001 | 2 | 32 | 16 | 07/24/10 09:56:18 | 12.44 | 6.66 | 7.54 | 47444 | 30.82 |
| 19830-013 | 2 | 33 | 16 | 07/24/10 09:56:39 | 12.47 | 6.73 | 7.54 | 47465 | 30.84 |
| 19830-010 | 2 | 34 | 16 | 07/24/10 09:57:00 | 12.54 | 7.15 | 7.59 | 47402 | 30.80 |
| 19830-006 | 2 | 35 | 16 | 07/24/10 09:57:25 | 12.79 | 7.44 | 7.51 | 47463 | 30.85 |
| 19830-005 | 2 | 36 | 16 | 07/24/10 09:57:44 | 12.81 | 7.25 | 7.42 | 47406 | 30.81 |
| 19830-013 | 3 | 37 | 16 | 07/24/10 09:58:07 | 12.78 | 6.36 | 7.43 | 47426 | 30.82 |
| 19830-009 | 3 | 38 | 16 | 07/24/10 09:58:35 | 12.86 | 6.98 | 7.52 | 47208 | 30.67 |
| 19830-017 | 3 | 39 | 16 | 07/24/10 09:58:50 | 12.83 | 7.20 | 7.43 | 47334 | 30.76 |
| 19830-016 | 3 | 40 | 16 | 07/24/10 09:59:15 | 12.73 | 6.99 | 7.48 | 47423 | 30.82 |
| 19830-000 | 3 | 41 | 16 | 07/24/10 09:59:39 | 12.82 | 7.81 | 7.58 | 47278 | 30.72 |
| 19830-010 | 3 | 42 | 16 | 07/24/10 10:00:02 | 12.80 | 7.79 | 7.53 | 47324 | 30.75 |
| 19830-008 | 3 | 43 | 16 | 07/24/10 10:00:28 | 12.69 | 7.44 | 7.55 | 47417 | 30.81 |
| 19830-014 | 3 | 44 | 16 | 07/24/10 10:00:49 | 12.66 | 7.25 | 7.66 | 47346 | 30.76 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-004 | 3 | 45 | 16 | 07/24/10 10:01:07 | 12.60 | 7.27 | 7.56 | 47369 | 30.78 |
| 19830-006 | 3 | 46 | 16 | 07/24/10 10:01:29 | 12.63 | 7.08 | 7.43 | 47350 | 30.76 |
| 19830-005 | 3 | 47 | 16 | 07/24/10 10:01:53 | 12.61 | 7.15 | 7.53 | 47349 | 30.76 |
| 19830-011 | 3 | 48 | 16 | 07/24/10 10:02:19 | 12.34 | 7.38 | 7.60 | 47523 | 30.88 |
| 19830-002 | 3 | 49 | 16 | 07/24/10 10:02:41 | 12.48 | 7.24 | 7.64 | 47382 | 30.78 |
| 19830-012 | 3 | 50 | 16 | 07/24/10 10:03:03 | 12.58 | 6.91 | 7.57 | 47383 | 30.79 |
| 19830-001 | 3 | 51 | 16 | 07/24/10 10:03:33 | 12.36 | 7.40 | 7.72 | 47536 | 30.89 |
| 19830-003 | 3 | 52 | 16 | 07/24/10 10:03:57 | 12.36 | 8.01 | 7.73 | 47492 | 30.86 |
| 19830-007 | 3 | 53 | 16 | 07/24/10 10:04:22 | 12.38 | 7.85 | 7.46 | 47390 | 30.78 |
| 19830-015 | 3 | 54 | 16 | 07/24/10 10:04:48 | 12.37 | 7.84 | 7.64 | 47425 | 30.81 |
| 19830-006 | 4 | 55 | 16 | 07/24/10 10:05:11 | 12.30 | 8.02 | 7.58 | 47453 | 30.82 |
| 19830-011 | 4 | 56 | 16 | 07/24/10 10:05:26 | 12.25 | 7.98 | 7.64 | 47486 | 30.85 |
| 19830-012 | 4 | 57 | 16 | 07/24/10 10:05:37 | 12.18 | 8.04 | 7.73 | 47507 | 30.86 |
| 19830-010 | 4 | 58 | 16 | 07/24/10 10:05:54 | 12.13 | 8.19 | 7.77 | 47520 | 30.87 |
| 19830-015 | 4 | 59 | 16 | 07/24/10 10:06:20 | 12.01 | 7.99 | 7.60 | 47516 | 30.86 |
| 19830-009 | 4 | 60 | 16 | 07/24/10 10:06:47 | 11.97 | 8.03 | 7.81 | 47584 | 30.91 |
| 19830-001 | 4 | 61 | 16 | 07/24/10 10:07:15 | 12.07 | 7.72 | 7.63 | 47625 | 30.94 |
| 19830-016 | 4 | 62 | 16 | 07/24/10 10:07:38 | 12.24 | 7.52 | 7.52 | 47497 | 30.85 |
| 19830-008 | 4 | 63 | 16 | 07/24/10 10:08:05 | 12.41 | 7.83 | 7.76 | 47499 | 30.86 |
| 19830-004 | 4 | 64 | 16 | 07/24/10 10:08:31 | 12.55 | 7.62 | 7.62 | 47487 | 30.86 |
| 19830-007 | 4 | 65 | 16 | 07/24/10 10:08:55 | 12.32 | 7.67 | 7.48 | 47454 | 30.83 |
| 19830-014 | 4 | 66 | 16 | 07/24/10 10:09:16 | 12.28 | 7.50 | 7.47 | 47439 | 30.81 |
| 19830-000 | 4 | 67 | 16 | 07/24/10 10:09:32 | 12.25 | 7.19 | 7.44 | 47398 | 30.78 |
| 19830-017 | 4 | 68 | 16 | 07/24/10 10:09:43 | 12.23 | 7.27 | 7.41 | 47422 | 30.80 |
| 19830-013 | 4 | 69 | 16 | 07/24/10 10:09:54 | 12.23 | 7.22 | 7.45 | 47429 | 30.80 |
| 19830-002 | 4 | 70 | 16 | 07/24/10 10:10:10 | 12.23 | 7.52 | 7.60 | 47444 | 30.81 |
| 19830-005 | 4 | 71 | 16 | 07/24/10 10:10:23 | 12.24 | 7.67 | 7.63 | 47415 | 30.80 |
| 19830-003 | 4 | 72 | 16 | 07/24/10 10:10:32 | 12.25 | 7.76 | 7.61 | 47456 | 30.82 |
| 19830-016 | 5 | 73 | 16 | 07/24/10 10:10:44 | 12.25 | 7.82 | 7.56 | 47428 | 30.80 |
| 19830-003 | 5 | 74 | 16 | 07/24/10 10:10:57 | 12.25 | 7.68 | 7.50 | 47438 | 30.81 |
| 19830-000 | 5 | 75 | 16 | 07/24/10 10:11:11 | 12.28 | 7.45 | 7.49 | 47402 | 30.79 |
| 19830-013 | 5 | 76 | 16 | 07/24/10 10:11:32 | 12.36 | 7.58 | 7.47 | 47392 | 30.78 |
| 19830-001 | 5 | 77 | 16 | 07/24/10 10:11:51 | 12.39 | 7.61 | 7.49 | 47479 | 30.85 |
| 19830-002 | 5 | 78 | 16 | 07/24/10 10:12:05 | 12.48 | 7.75 | 7.51 | 47416 | 30.81 |
| 19830-004 | 5 | 79 | 16 | 07/24/10 10:12:20 | 12.56 | 7.53 | 7.52 | 47410 | 30.80 |
| 19830-012 | 5 | 80 | 16 | 07/24/10 10:12:33 | 12.63 | 7.41 | 7.60 | 47455 | 30.84 |
| 19830-005 | 5 | 81 | 16 | 07/24/10 10:12:51 | 12.38 | 7.80 | 7.57 | 47405 | 30.79 |
| 19830-011 | 5 | 82 | 16 | 07/24/10 10:13:05 | 12.26 | 7.44 | 7.60 | 47446 | 30.82 |
| 19830-010 | 5 | 83 | 16 | 07/24/10 10:13:17 | 12.21 | 7.59 | 7.66 | 47526 | 30.87 |
| 19830-017 | 5 | 84 | 16 | 07/24/10 10:13:28 | 12.20 | 7.79 | 7.62 | 47428 | 30.80 |
| 19830-009 | 5 | 85 | 16 | 07/24/10 10:13:48 | 12.23 | 7.15 | 7.59 | 47491 | 30.85 |
| 19830-006 | 5 | 86 | 16 | 07/24/10 10:14:10 | 12.25 | 7.44 | 7.47 | 47492 | 30.85 |
| 19830-008 | 5 | 87 | 16 | 07/24/10 10:14:29 | 12.26 | 7.80 | 7.63 | 47436 | 30.81 |
| 19830-007 | 5 | 88 | 16 | 07/24/10 10:15:14 | 12.28 | 7.99 | 7.49 | 46892 | 30.42 |
| 19830-014 | 5 | 89 | 16 | 07/24/10 10:15:32 | 12.27 | 8.00 | 7.56 | 47486 | 30.85 |
| 19830-015 | 5 | 90 | 16 | 07/24/10 10:15:46 | 12.27 | 7.94 | 7.60 | 47485 | 30.85 |
| 19830-005 | 6 | 91 | 16 | 07/24/10 10:16:00 | 12.29 | 7.94 | 7.63 | 47445 | 30.82 |
| 19830-007 | 6 | 92 | 16 | 07/24/10 10:16:18 | 12.34 | 7.93 | 7.56 | 47436 | 30.81 |
| 19830-002 | 6 | 93 | 16 | 07/24/10 10:16:34 | 12.38 | 7.99 | 7.56 | 47493 | 30.86 |
| 19830-009 | 6 | 94 | 16 | 07/24/10 10:16:58 | 12.44 | 7.49 | 7.65 | 47459 | 30.83 |
| 19830-013 | 6 | 95 | 16 | 07/24/10 10:17:15 | 12.45 | 7.43 | 7.65 | 47520 | 30.88 |
| 19830-004 | 6 | 96 | 16 | 07/24/10 10:17:34 | 12.53 | 7.69 | 7.67 | 47547 | 30.90 |
| 19830-012 | 6 | 97 | 16 | 07/24/10 10:18:05 | 12.37 | 7.98 | 7.68 | 47503 | 30.86 |
| 19830-015 | 6 | 98 | 16 | 07/24/10 10:18:21 | 12.23 | 7.93 | 7.66 | 47482 | 30.84 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-014 | 6 | 99 | 16 | 07/24/10 10:18:38 | 12.20 | 7.82 | 7.67 | 47556 | 30.90 |
| 19830-003 | 6 | 100 | 16 | 07/24/10 10:18:56 | 12.20 | 7.81 | 7.62 | 47604 | 30.93 |
| 19830-010 | 6 | 101 | 16 | 07/24/10 10:19:14 | 12.20 | 8.07 | 7.70 | 47635 | 30.95 |
| 19830-000 | 6 | 102 | 16 | 07/24/10 10:19:28 | 12.19 | 8.27 | 7.67 | 47524 | 30.87 |
| 19830-016 | 6 | 103 | 16 | 07/24/10 10:19:38 | 12.18 | 8.24 | 7.65 | 47569 | 30.90 |
| 19830-001 | 6 | 104 | 16 | 07/24/10 10:19:51 | 12.18 | 8.12 | 7.73 | 47583 | 30.91 |
| 19830-017 | 6 | 105 | 16 | 07/24/10 10:20:08 | 12.14 | 8.19 | 7.69 | 47418 | 30.79 |
| 19830-008 | 6 | 106 | 16 | 07/24/10 10:20:23 | 12.13 | 8.20 | 7.77 | 47541 | 30.88 |
| 19830-011 | 6 | 107 | 16 | 07/24/10 10:20:37 | 12.19 | 8.27 | 7.75 | 47576 | 30.91 |
| 19830-006 | 6 | 108 | 16 | 07/24/10 10:21:00 | 12.36 | 8.07 | 7.63 | 47584 | 30.92 |
| 19830-015 | 7 | 109 | 16 | 07/24/10 10:21:16 | 12.50 | 8.09 | 7.65 | 47637 | 30.97 |
| 19830-017 | 7 | 110 | 16 | 07/24/10 10:21:30 | 12.61 | 8.00 | 7.67 | 47639 | 30.97 |
| 19830-003 | 7 | 111 | 16 | 07/24/10 10:21:45 | 12.70 | 8.04 | 7.63 | 47649 | 30.98 |
| 19830-008 | 7 | 112 | 16 | 07/24/10 10:21:58 | 12.78 | 7.99 | 7.69 | 47627 | 30.97 |
| 19830-006 | 7 | 113 | 16 | 07/24/10 10:22:17 | 12.62 | 8.29 | 7.67 | 47310 | 30.73 |
| 19830-012 | 7 | 114 | 16 | 07/24/10 10:22:30 | 12.52 | 8.27 | 7.67 | 47332 | 30.75 |
| 19830-004 | 7 | 115 | 16 | 07/24/10 10:22:43 | 12.45 | 8.19 | 7.70 | 47329 | 30.74 |
| 19830-011 | 7 | 116 | 16 | 07/24/10 10:22:52 | 12.42 | 8.19 | 7.70 | 47295 | 30.72 |
| 19830-014 | 7 | 117 | 16 | 07/24/10 10:23:05 | 12.35 | 8.09 | 7.72 | 47380 | 30.77 |
| 19830-005 | 7 | 118 | 16 | 07/24/10 10:23:16 | 12.34 | 8.23 | 7.67 | 47324 | 30.73 |
| 19830-001 | 7 | 119 | 16 | 07/24/10 10:23:25 | 12.34 | 8.26 | 7.67 | 47394 | 30.78 |
| 19830-000 | 7 | 120 | 16 | 07/24/10 10:23:36 | 12.34 | 8.22 | 7.69 | 47315 | 30.73 |
| 19830-009 | 7 | 121 | 16 | 07/24/10 10:23:49 | 12.23 | 8.30 | 7.70 | 47398 | 30.78 |
| 19830-010 | 7 | 122 | 16 | 07/24/10 10:24:04 | 12.16 | 8.04 | 7.65 | 47452 | 30.82 |
| 19830-007 | 7 | 123 | 16 | 07/24/10 10:24:16 | 12.19 | 7.86 | 7.54 | 47461 | 30.83 |
| 19830-002 | 7 | 124 | 16 | 07/24/10 10:24:30 | 12.26 | 7.73 | 7.55 | 47542 | 30.89 |
| 19830-013 | 7 | 125 | 16 | 07/24/10 10:24:45 | 12.34 | 7.72 | 7.61 | 47562 | 30.90 |
| 19830-016 | 7 | 126 | 16 | 07/24/10 10:25:00 | 12.49 | 7.89 | 7.57 | 47492 | 30.86 |
| 19830-017 | 8 | 127 | 16 | 07/24/10 10:25:15 | 12.61 | 7.84 | 7.55 | 47476 | 30.85 |
| 19830-013 | 8 | 128 | 16 | 07/24/10 10:25:30 | 12.76 | 7.80 | 7.61 | 47505 | 30.88 |
| 19830-010 | 8 | 129 | 16 | 07/24/10 10:25:47 | 12.66 | 8.01 | 7.69 | 47203 | 30.66 |
| 19830-007 | 8 | 130 | 16 | 07/24/10 10:25:59 | 12.58 | 8.11 | 7.65 | 47300 | 30.73 |
| 19830-011 | 8 | 131 | 16 | 07/24/10 10:26:31 | 12.42 | 6.79 | 7.61 | 47436 | 30.82 |
| 19830-002 | 8 | 132 | 16 | 07/24/10 10:26:50 | 12.45 | 6.50 | 7.67 | 47249 | 30.68 |
| 19830-004 | 8 | 133 | 16 | 07/24/10 10:27:22 | 12.47 | 7.33 | 7.57 | 47334 | 30.75 |
| 19830-003 | 8 | 134 | 16 | 07/24/10 10:27:37 | 12.43 | 7.54 | 7.59 | 47370 | 30.77 |
| 19830-005 | 8 | 135 | 16 | 07/24/10 10:27:50 | 12.37 | 7.76 | 7.51 | 47376 | 30.77 |
| 19830-012 | 8 | 136 | 16 | 07/24/10 10:28:19 | 12.33 | 6.00 | 7.47 | 47441 | 30.82 |
| 19830-006 | 8 | 137 | 16 | 07/24/10 10:29:00 | 12.28 | 7.40 | 7.42 | 45639 | 29.52 |
| 19830-001 | 8 | 138 | 16 | 07/24/10 10:29:38 | 12.27 | 7.81 | 7.68 | 45062 | 29.10 |
| 19830-014 | 8 | 139 | 16 | 07/24/10 10:29:52 | 12.29 | 7.71 | 7.66 | 47478 | 30.84 |
| 19830-000 | 8 | 140 | 16 | 07/24/10 10:30:07 | 12.35 | 7.39 | 7.63 | 47447 | 30.82 |
| 19830-009 | 8 | 141 | 16 | 07/24/10 10:30:21 | 12.40 | 7.85 | 7.71 | 47542 | 30.89 |
| 19830-008 | 8 | 142 | 16 | 07/24/10 10:30:35 | 12.46 | 8.01 | 7.77 | 47533 | 30.89 |
| 19830-015 | 8 | 143 | 16 | 07/24/10 10:30:48 | 12.55 | 8.09 | 7.70 | 47543 | 30.90 |
| 19830-016 | 8 | 144 | 16 | 07/24/10 10:31:02 | 12.71 | 7.95 | 7.57 | 47545 | 30.91 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 17 | 07/25/10 15:18:55 | 13.14 | 8.03 | 7.59 | 46956 | 30.50 |
| 19830-016 | 1 | 2 | 17 | 07/25/10 15:19:41 | 13.00 | 7.90 | 7.59 | 44655 | 28.84 |
| 19830-015 | 1 | 3 | 17 | 07/25/10 15:19:54 | 12.96 | 7.89 | 7.58 | 46878 | 30.44 |
| 19830-017 | 1 | 4 | 17 | 07/25/10 15:20:32 | 12.99 | 7.04 | 7.44 | 46922 | 30.47 |
| 19830-001 | 1 | 5 | 17 | 07/25/10 15:20:50 | 12.96 | 7.01 | 7.57 | 46973 | 30.50 |
| 19830-011 | 1 | 6 | 17 | 07/25/10 15:21:11 | 12.93 | 7.25 | 7.57 | 46951 | 30.49 |
| 19830-014 | 1 | 7 | 17 | 07/25/10 15:22:16 | 12.90 | 6.05 | 7.49 | 46946 | 30.48 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 1 | 8 | 17 | 07/25/10 15:22:51 | 12.81 | 6.00 | 7.51 | 46973 | 30.50 |
| 19830-012 | 1 | 9 | 17 | 07/25/10 15:23:33 | 12.86 | 6.90 | 7.68 | 46963 | 30.49 |
| 19830-010 | 1 | 10 | 17 | 07/25/10 15:23:59 | 12.77 | 7.15 | 7.62 | 46966 | 30.49 |
| 19830-008 | 1 | 11 | 17 | 07/25/10 15:24:10 | 12.75 | 7.14 | 7.67 | 46940 | 30.47 |
| 19830-006 | 1 | 12 | 17 | 07/25/10 15:24:23 | 12.71 | 7.22 | 7.69 | 46973 | 30.49 |
| 19830-004 | 1 | 13 | 17 | 07/25/10 15:24:40 | 12.71 | 7.70 | 7.62 | 46967 | 30.49 |
| 19830-013 | 1 | 14 | 17 | 07/25/10 15:24:58 | 12.69 | 7.66 | 7.59 | 46977 | 30.50 |
| 19830-000 | 1 | 15 | 17 | 07/25/10 15:25:14 | 12.65 | 7.68 | 7.58 | 46959 | 30.48 |
| 19830-005 | 1 | 16 | 17 | 07/25/10 15:25:29 | 12.61 | 7.93 | 7.66 | 46980 | 30.50 |
| 19830-007 | 1 | 17 | 17 | 07/25/10 15:25:48 | 12.58 | 8.14 | 7.59 | 47016 | 30.52 |
| 19830-003 | 1 | 18 | 17 | 07/25/10 15:26:05 | 12.66 | 8.06 | 7.57 | 47033 | 30.54 |
| 19830-009 | 2 | 19 | 17 | 07/25/10 15:26:41 | 12.97 | 7.79 | 7.65 | 46951 | 30.49 |
| 19830-016 | 2 | 20 | 17 | 07/25/10 15:26:58 | 12.99 | 7.66 | 7.70 | 46932 | 30.48 |
| 19830-007 | 2 | 21 | 17 | 07/25/10 15:27:44 | 12.99 | 6.39 | 7.30 | 46894 | 30.45 |
| 19830-015 | 2 | 22 | 17 | 07/25/10 15:28:25 | 12.96 | 7.44 | 7.58 | 46915 | 30.46 |
| 19830-008 | 2 | 23 | 17 | 07/25/10 15:28:37 | 12.96 | 7.54 | 7.67 | 46916 | 30.46 |
| 19830-002 | 2 | 24 | 17 | 07/25/10 15:28:50 | 12.95 | 7.59 | 7.65 | 46925 | 30.47 |
| 19830-012 | 2 | 25 | 17 | 07/25/10 15:29:09 | 12.90 | 7.33 | 7.57 | 46915 | 30.46 |
| 19830-004 | 2 | 26 | 17 | 07/25/10 15:29:37 | 12.87 | 7.12 | 7.40 | 46882 | 30.44 |
| 19830-000 | 2 | 27 | 17 | 07/25/10 15:30:08 | 12.75 | 7.66 | 7.48 | 46926 | 30.46 |
| 19830-003 | 2 | 28 | 17 | 07/25/10 15:30:20 | 12.74 | 7.79 | 7.51 | 46740 | 30.33 |
| 19830-011 | 2 | 29 | 17 | 07/25/10 15:30:30 | 12.73 | 7.83 | 7.54 | 46938 | 30.47 |
| 19830-017 | 2 | 30 | 17 | 07/25/10 15:30:59 | 12.74 | 7.76 | 7.55 | 46927 | 30.46 |
| 19830-014 | 2 | 31 | 17 | 07/25/10 15:31:37 | 12.71 | 6.87 | 7.49 | 46956 | 30.48 |
| 19830-001 | 2 | 32 | 17 | 07/25/10 15:31:52 | 12.66 | 6.74 | 7.53 | 46944 | 30.47 |
| 19830-013 | 2 | 33 | 17 | 07/25/10 15:32:28 | 12.63 | 7.35 | 7.56 | 46984 | 30.50 |
| 19830-010 | 2 | 34 | 17 | 07/25/10 15:32:41 | 12.66 | 7.43 | 7.58 | 46978 | 30.50 |
| 19830-006 | 2 | 35 | 17 | 07/25/10 15:33:07 | 12.93 | 7.59 | 7.52 | 46986 | 30.51 |
| 19830-005 | 2 | 36 | 17 | 07/25/10 15:33:40 | 12.97 | 7.04 | 7.49 | 46942 | 30.48 |
| 19830-013 | 3 | 37 | 17 | 07/25/10 15:33:52 | 12.91 | 6.92 | 7.47 | 46965 | 30.50 |
| 19830-009 | 3 | 38 | 17 | 07/25/10 15:34:32 | 13.00 | 7.58 | 7.57 | 46925 | 30.47 |
| 19830-017 | 3 | 39 | 17 | 07/25/10 15:34:44 | 13.00 | 7.67 | 7.51 | 46909 | 30.46 |
| 19830-016 | 3 | 40 | 17 | 07/25/10 15:35:01 | 12.90 | 7.24 | 7.51 | 46931 | 30.47 |
| 19830-000 | 3 | 41 | 17 | 07/25/10 15:35:40 | 12.95 | 8.21 | 7.64 | 46898 | 30.45 |
| 19830-010 | 3 | 42 | 17 | 07/25/10 15:35:51 | 12.90 | 8.30 | 7.60 | 46918 | 30.46 |
| 19830-008 | 3 | 43 | 17 | 07/25/10 15:36:23 | 12.79 | 7.73 | 7.62 | 46959 | 30.49 |
| 19830-014 | 3 | 44 | 17 | 07/25/10 15:36:53 | 12.84 | 7.46 | 7.60 | 46928 | 30.47 |
| 19830-004 | 3 | 45 | 17 | 07/25/10 15:37:16 | 12.82 | 7.23 | 7.49 | 46912 | 30.45 |
| 19830-006 | 3 | 46 | 17 | 07/25/10 15:37:27 | 12.82 | 7.12 | 7.49 | 46926 | 30.47 |
| 19830-005 | 3 | 47 | 17 | 07/25/10 15:38:00 | 12.79 | 7.53 | 7.61 | 46931 | 30.47 |
| 19830-011 | 3 | 48 | 17 | 07/25/10 15:38:36 | 12.48 | 7.28 | 7.58 | 47032 | 30.53 |
| 19830-002 | 3 | 49 | 17 | 07/25/10 15:38:56 | 12.68 | 7.12 | 7.55 | 46988 | 30.50 |
| 19830-012 | 3 | 50 | 17 | 07/25/10 15:39:24 | 12.75 | 7.03 | 7.55 | 46947 | 30.48 |
| 19830-001 | 3 | 51 | 17 | 07/25/10 15:39:57 | 12.44 | 7.77 | 7.74 | 47013 | 30.51 |
| 19830-003 | 3 | 52 | 17 | 07/25/10 15:40:23 | 12.45 | 8.20 | 7.73 | 47020 | 30.52 |
| 19830-007 | 3 | 53 | 17 | 07/25/10 15:41:02 | 12.52 | 7.64 | 7.44 | 46972 | 30.49 |
| 19830-015 | 3 | 54 | 17 | 07/25/10 15:41:38 | 12.50 | 8.06 | 7.71 | 46976 | 30.49 |
| 19830-006 | 4 | 55 | 17 | 07/25/10 15:41:51 | 12.44 | 8.16 | 7.65 | 46982 | 30.49 |
| 19830-011 | 4 | 56 | 17 | 07/25/10 15:42:06 | 12.39 | 8.02 | 7.68 | 47030 | 30.52 |
| 19830-012 | 4 | 57 | 17 | 07/25/10 15:42:18 | 12.34 | 8.09 | 7.74 | 47029 | 30.52 |
| 19830-010 | 4 | 58 | 17 | 07/25/10 15:42:39 | 12.26 | 8.32 | 7.78 | 47011 | 30.50 |
| 19830-015 | 4 | 59 | 17 | 07/25/10 15:42:53 | 12.15 | 8.32 | 7.72 | 46978 | 30.48 |
| 19830-009 | 4 | 60 | 17 | 07/25/10 15:43:08 | 12.09 | 8.15 | 7.73 | 47058 | 30.53 |
| 19830-001 | 4 | 61 | 17 | 07/25/10 15:43:42 | 12.18 | 7.92 | 7.69 | 47081 | 30.55 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-016 | 4 | 62 | 17 | 07/25/10 15:43:59 | 12.36 | 7.79 | 7.61 | 47059 | 30.54 |
| 19830-008 | 4 | 63 | 17 | 07/25/10 15:44:16 | 12.52 | 7.73 | 7.72 | 47065 | 30.55 |
| 19830-004 | 4 | 64 | 17 | 07/25/10 15:44:37 | 12.66 | 7.78 | 7.64 | 47029 | 30.53 |
| 19830-007 | 4 | 65 | 17 | 07/25/10 15:45:07 | 12.41 | 7.70 | 7.48 | 46988 | 30.49 |
| 19830-014 | 4 | 66 | 17 | 07/25/10 15:45:45 | 12.43 | 7.22 | 7.51 | 46989 | 30.50 |
| 19830-000 | 4 | 67 | 17 | 07/25/10 15:46:20 | 12.43 | 7.39 | 7.49 | 46969 | 30.48 |
| 19830-017 | 4 | 68 | 17 | 07/25/10 15:46:51 | 12.42 | 7.34 | 7.44 | 46983 | 30.49 |
| 19830-013 | 4 | 69 | 17 | 07/25/10 15:47:21 | 12.44 | 7.63 | 7.59 | 46983 | 30.49 |
| 19830-002 | 4 | 70 | 17 | 07/25/10 15:47:40 | 12.45 | 7.77 | 7.67 | 46985 | 30.49 |
| 19830-005 | 4 | 71 | 17 | 07/25/10 15:48:02 | 12.47 | 7.87 | 7.66 | 46960 | 30.48 |
| 19830-003 | 4 | 72 | 17 | 07/25/10 15:48:16 | 12.43 | 7.93 | 7.62 | 46936 | 30.46 |
| 19830-016 | 5 | 73 | 17 | 07/25/10 15:48:48 | 12.41 | 7.69 | 7.52 | 46971 | 30.48 |
| 19830-003 | 5 | 74 | 17 | 07/25/10 15:49:16 | 12.47 | 7.41 | 7.51 | 46983 | 30.49 |
| 19830-000 | 5 | 75 | 17 | 07/25/10 15:49:49 | 12.56 | 7.76 | 7.57 | 46942 | 30.47 |
| 19830-013 | 5 | 76 | 17 | 07/25/10 15:50:12 | 12.62 | 7.74 | 7.52 | 46947 | 30.47 |
| 19830-001 | 5 | 77 | 17 | 07/25/10 15:50:27 | 12.65 | 7.71 | 7.51 | 46908 | 30.45 |
| 19830-002 | 5 | 78 | 17 | 07/25/10 15:50:44 | 12.73 | 7.82 | 7.55 | 46974 | 30.50 |
| 19830-004 | 5 | 79 | 17 | 07/25/10 15:51:01 | 12.78 | 7.55 | 7.54 | 46948 | 30.48 |
| 19830-012 | 5 | 80 | 17 | 07/25/10 15:51:15 | 12.79 | 7.53 | 7.62 | 46983 | 30.50 |
| 19830-005 | 5 | 81 | 17 | 07/25/10 15:51:41 | 12.45 | 7.82 | 7.64 | 46968 | 30.48 |
| 19830-011 | 5 | 82 | 17 | 07/25/10 15:51:55 | 12.40 | 7.62 | 7.66 | 47004 | 30.51 |
| 19830-010 | 5 | 83 | 17 | 07/25/10 15:52:11 | 12.39 | 7.83 | 7.69 | 47014 | 30.51 |
| 19830-017 | 5 | 84 | 17 | 07/25/10 15:52:51 | 12.44 | 6.88 | 7.45 | 46941 | 30.46 |
| 19830-009 | 5 | 85 | 17 | 07/25/10 15:53:12 | 12.43 | 7.10 | 7.58 | 47012 | 30.51 |
| 19830-006 | 5 | 86 | 17 | 07/25/10 15:53:30 | 12.45 | 7.45 | 7.55 | 47043 | 30.54 |
| 19830-008 | 5 | 87 | 17 | 07/25/10 15:53:49 | 12.48 | 7.87 | 7.67 | 46990 | 30.50 |
| 19830-007 | 5 | 88 | 17 | 07/25/10 15:54:04 | 12.45 | 8.04 | 7.58 | 46929 | 30.45 |
| 19830-014 | 5 | 89 | 17 | 07/25/10 15:54:20 | 12.38 | 8.11 | 7.61 | 46996 | 30.50 |
| 19830-015 | 5 | 90 | 17 | 07/25/10 15:54:40 | 12.40 | 8.10 | 7.65 | 47005 | 30.51 |
| 19830-005 | 6 | 91 | 17 | 07/25/10 15:54:57 | 12.45 | 8.13 | 7.69 | 46994 | 30.50 |
| 19830-007 | 6 | 92 | 17 | 07/25/10 15:55:12 | 12.49 | 8.13 | 7.61 | 46989 | 30.50 |
| 19830-002 | 6 | 93 | 17 | 07/25/10 15:55:31 | 12.55 | 8.04 | 7.59 | 46999 | 30.51 |
| 19830-009 | 6 | 94 | 17 | 07/25/10 15:55:52 | 12.60 | 7.75 | 7.66 | 46983 | 30.50 |
| 19830-013 | 6 | 95 | 17 | 07/25/10 15:56:07 | 12.62 | 7.61 | 7.62 | 47006 | 30.52 |
| 19830-004 | 6 | 96 | 17 | 07/25/10 15:56:24 | 12.65 | 7.74 | 7.62 | 47015 | 30.52 |
| 19830-012 | 6 | 97 | 17 | 07/25/10 15:56:54 | 12.46 | 8.20 | 7.68 | 47005 | 30.51 |
| 19830-015 | 6 | 98 | 17 | 07/25/10 15:57:22 | 12.31 | 7.89 | 7.68 | 46995 | 30.50 |
| 19830-014 | 6 | 99 | 17 | 07/25/10 15:57:40 | 12.29 | 7.79 | 7.67 | 47056 | 30.54 |
| 19830-003 | 6 | 100 | 17 | 07/25/10 15:57:52 | 12.29 | 7.76 | 7.66 | 47050 | 30.53 |
| 19830-010 | 6 | 101 | 17 | 07/25/10 15:58:09 | 12.29 | 8.07 | 7.68 | 47074 | 30.55 |
| 19830-000 | 6 | 102 | 17 | 07/25/10 15:58:27 | 12.29 | 8.24 | 7.67 | 47041 | 30.53 |
| 19830-016 | 6 | 103 | 17 | 07/25/10 15:58:47 | 12.27 | 8.21 | 7.68 | 47068 | 30.55 |
| 19830-001 | 6 | 104 | 17 | 07/25/10 15:59:07 | 12.24 | 8.14 | 7.77 | 47062 | 30.54 |
| 19830-017 | 6 | 105 | 17 | 07/25/10 15:59:26 | 12.15 | 8.30 | 7.69 | 47039 | 30.52 |
| 19830-008 | 6 | 106 | 17 | 07/25/10 15:59:45 | 12.15 | 8.34 | 7.79 | 47040 | 30.52 |
| 19830-011 | 6 | 107 | 17 | 07/25/10 16:00:05 | 12.24 | 8.27 | 7.69 | 47063 | 30.54 |
| 19830-006 | 6 | 108 | 17 | 07/25/10 16:00:21 | 12.36 | 8.09 | 7.67 | 47113 | 30.58 |
| 19830-015 | 7 | 109 | 17 | 07/25/10 16:00:42 | 12.55 | 8.15 | 7.69 | 47088 | 30.57 |
| 19830-017 | 7 | 110 | 17 | 07/25/10 16:01:03 | 12.69 | 8.10 | 7.69 | 47078 | 30.57 |
| 19830-003 | 7 | 111 | 17 | 07/25/10 16:01:20 | 12.78 | 8.10 | 7.65 | 47060 | 30.56 |
| 19830-008 | 7 | 112 | 17 | 07/25/10 16:02:03 | 12.86 | 8.25 | 7.74 | 47056 | 30.56 |
| 19830-006 | 7 | 113 | 17 | 07/25/10 16:02:26 | 12.78 | 8.32 | 7.66 | 46928 | 30.46 |
| 19830-012 | 7 | 114 | 17 | 07/25/10 16:03:14 | 12.78 | 8.06 | 7.67 | 46925 | 30.46 |
| 19830-004 | 7 | 115 | 17 | 07/25/10 16:03:32 | 12.73 | 8.07 | 7.69 | 46921 | 30.46 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 7 | 116 | 17 | 07/25/10 16:03:49 | 12.71 | 8.05 | 7.69 | 46916 | 30.45 |
| 19830-014 | 7 | 117 | 17 | 07/25/10 16:04:09 | 12.64 | 8.01 | 7.72 | 46942 | 30.47 |
| 19830-005 | 7 | 118 | 17 | 07/25/10 16:04:29 | 12.63 | 8.23 | 7.64 | 46922 | 30.45 |
| 19830-001 | 7 | 119 | 17 | 07/25/10 16:04:48 | 12.61 | 8.19 | 7.73 | 46941 | 30.47 |
| 19830-000 | 7 | 120 | 17 | 07/25/10 16:05:06 | 12.54 | 8.23 | 7.70 | 46903 | 30.44 |
| 19830-009 | 7 | 121 | 17 | 07/25/10 16:05:24 | 12.32 | 8.28 | 7.65 | 46977 | 30.48 |
| 19830-010 | 7 | 122 | 17 | 07/25/10 16:05:42 | 12.33 | 7.95 | 7.68 | 47010 | 30.51 |
| 19830-007 | 7 | 123 | 17 | 07/25/10 16:05:57 | 12.37 | 7.86 | 7.58 | 47001 | 30.50 |
| 19830-002 | 7 | 124 | 17 | 07/25/10 16:06:13 | 12.43 | 7.74 | 7.61 | 47031 | 30.53 |
| 19830-013 | 7 | 125 | 17 | 07/25/10 16:06:33 | 12.49 | 7.86 | 7.65 | 47042 | 30.54 |
| 19830-016 | 7 | 126 | 17 | 07/25/10 16:06:48 | 12.64 | 8.00 | 7.63 | 47029 | 30.53 |
| 19830-017 | 8 | 127 | 17 | 07/25/10 16:07:00 | 12.74 | 7.93 | 7.61 | 47021 | 30.53 |
| 19830-013 | 8 | 128 | 17 | 07/25/10 16:07:14 | 12.85 | 7.86 | 7.62 | 47024 | 30.54 |
| 19830-010 | 8 | 129 | 17 | 07/25/10 16:07:34 | 12.80 | 8.03 | 7.71 | 46945 | 30.48 |
| 19830-007 | 8 | 130 | 17 | 07/25/10 16:07:46 | 12.78 | 8.09 | 7.66 | 46906 | 30.45 |
| 19830-011 | 8 | 131 | 17 | 07/25/10 16:07:55 | 12.70 | 8.11 | 7.64 | 46907 | 30.45 |
| 19830-002 | 8 | 132 | 17 | 07/25/10 16:08:17 | 12.69 | 7.08 | 7.69 | 46964 | 30.49 |
| 19830-004 | 8 | 133 | 17 | 07/25/10 16:08:41 | 12.74 | 7.21 | 7.63 | 46925 | 30.46 |
| 19830-003 | 8 | 134 | 17 | 07/25/10 16:09:01 | 12.71 | 7.64 | 7.63 | 46934 | 30.47 |
| 19830-005 | 8 | 135 | 17 | 07/25/10 16:09:16 | 12.61 | 7.89 | 7.54 | 46932 | 30.46 |
| 19830-012 | 8 | 136 | 17 | 07/25/10 16:10:29 | 12.48 | 4.75 | 7.51 | 46976 | 30.49 |
| 19830-006 | 8 | 137 | 17 | 07/25/10 16:11:19 | 12.39 | 8.08 | 7.55 | 47030 | 30.52 |
| 19830-001 | 8 | 138 | 17 | 07/25/10 16:11:36 | 12.43 | 8.11 | 7.63 | 47026 | 30.52 |
| 19830-014 | 8 | 139 | 17 | 07/25/10 16:11:49 | 12.47 | 7.79 | 7.68 | 47044 | 30.54 |
| 19830-000 | 8 | 140 | 17 | 07/25/10 16:12:06 | 12.54 | 7.51 | 7.66 | 46989 | 30.50 |
| 19830-009 | 8 | 141 | 17 | 07/25/10 16:12:24 | 12.59 | 7.97 | 7.71 | 47012 | 30.52 |
| 19830-008 | 8 | 142 | 17 | 07/25/10 16:12:38 | 12.62 | 8.02 | 7.76 | 47041 | 30.54 |
| 19830-015 | 8 | 143 | 17 | 07/25/10 16:12:49 | 12.68 | 8.05 | 7.73 | 47066 | 30.56 |
| 19830-016 | 8 | 144 | 17 | 07/25/10 16:13:06 | 12.85 | 7.87 | 7.63 | 47019 | 30.53 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 18 | 07/26/10 09:40:06 | 12.98 | 8.03 | 7.56 | 47109 | 30.60 |
| 19830-016 | 1 | 2 | 18 | 07/26/10 09:40:50 | 12.87 | 7.78 | 7.52 | 46630 | 30.25 |
| 19830-015 | 1 | 3 | 18 | 07/26/10 09:41:09 | 12.84 | 7.68 | 7.53 | 47090 | 30.58 |
| 19830-017 | 1 | 4 | 18 | 07/26/10 09:41:29 | 12.86 | 7.34 | 7.41 | 47079 | 30.58 |
| 19830-001 | 1 | 5 | 18 | 07/26/10 09:41:47 | 12.87 | 7.21 | 7.51 | 47120 | 30.61 |
| 19830-011 | 1 | 6 | 18 | 07/26/10 09:42:07 | 12.83 | 7.34 | 7.49 | 47114 | 30.60 |
| 19830-014 | 1 | 7 | 18 | 07/26/10 09:42:19 | 12.78 | 7.26 | 7.45 | 47107 | 30.59 |
| 19830-009 | 1 | 8 | 18 | 07/26/10 09:42:37 | 12.72 | 6.59 | 7.43 | 47154 | 30.63 |
| 19830-012 | 1 | 9 | 18 | 07/26/10 09:42:49 | 12.72 | 6.39 | 7.48 | 47184 | 30.65 |
| 19830-010 | 1 | 10 | 18 | 07/26/10 09:43:13 | 12.66 | 6.96 | 7.56 | 47129 | 30.60 |
| 19830-008 | 1 | 11 | 18 | 07/26/10 09:43:28 | 12.60 | 7.30 | 7.71 | 47120 | 30.60 |
| 19830-006 | 1 | 12 | 18 | 07/26/10 09:43:44 | 12.59 | 7.49 | 7.64 | 47122 | 30.60 |
| 19830-004 | 1 | 13 | 18 | 07/26/10 09:44:04 | 12.61 | 7.87 | 7.57 | 47120 | 30.60 |
| 19830-013 | 1 | 14 | 18 | 07/26/10 09:44:16 | 12.59 | 7.88 | 7.55 | 47140 | 30.61 |
| 19830-000 | 1 | 15 | 18 | 07/26/10 09:44:26 | 12.56 | 7.83 | 7.55 | 47115 | 30.59 |
| 19830-005 | 1 | 16 | 18 | 07/26/10 09:44:36 | 12.52 | 7.93 | 7.61 | 47204 | 30.65 |
| 19830-007 | 1 | 17 | 18 | 07/26/10 09:44:47 | 12.52 | 8.11 | 7.60 | 47209 | 30.66 |
| 19830-003 | 1 | 18 | 18 | 07/26/10 09:44:56 | 12.53 | 8.16 | 7.56 | 47310 | 30.73 |
| 19830-009 | 2 | 19 | 18 | 07/26/10 09:45:11 | 12.70 | 8.16 | 7.57 | 47239 | 30.69 |
| 19830-016 | 2 | 20 | 18 | 07/26/10 09:45:24 | 12.80 | 8.01 | 7.64 | 47114 | 30.60 |
| 19830-007 | 2 | 21 | 18 | 07/26/10 09:45:42 | 12.81 | 7.52 | 7.40 | 47047 | 30.55 |
| 19830-015 | 2 | 22 | 18 | 07/26/10 09:45:52 | 12.80 | 7.08 | 7.39 | 47051 | 30.55 |
| 19830-008 | 2 | 23 | 18 | 07/26/10 09:46:12 | 12.77 | 7.61 | 7.71 | 47065 | 30.56 |
| 19830-002 | 2 | 24 | 18 | 07/26/10 09:46:22 | 12.74 | 7.82 | 7.67 | 47053 | 30.55 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2 | 25 | 18 | 07/26/10 09:46:36 | 12.68 | 7.61 | 7.57 | 47049 | 30.55 |
| 19830-004 | 2 | 26 | 18 | 07/26/10 09:46:48 | 12.69 | 7.49 | 7.51 | 47080 | 30.57 |
| 19830-000 | 2 | 27 | 18 | 07/26/10 09:47:06 | 12.61 | 7.62 | 7.45 | 47064 | 30.56 |
| 19830-003 | 2 | 28 | 18 | 07/26/10 09:47:16 | 12.58 | 7.77 | 7.45 | 46815 | 30.38 |
| 19830-011 | 2 | 29 | 18 | 07/26/10 09:47:27 | 12.54 | 7.87 | 7.52 | 47122 | 30.60 |
| 19830-017 | 2 | 30 | 18 | 07/26/10 09:47:36 | 12.54 | 7.87 | 7.53 | 47110 | 30.59 |
| 19830-014 | 2 | 31 | 18 | 07/26/10 09:47:45 | 12.54 | 7.84 | 7.49 | 47094 | 30.58 |
| 19830-001 | 2 | 32 | 18 | 07/26/10 09:47:57 | 12.48 | 7.45 | 7.48 | 47113 | 30.59 |
| 19830-013 | 2 | 33 | 18 | 07/26/10 09:48:19 | 12.49 | 6.97 | 7.45 | 47167 | 30.63 |
| 19830-010 | 2 | 34 | 18 | 07/26/10 09:48:34 | 12.53 | 7.36 | 7.53 | 47137 | 30.61 |
| 19830-006 | 2 | 35 | 18 | 07/26/10 09:49:02 | 12.75 | 7.81 | 7.49 | 47158 | 30.63 |
| 19830-005 | 2 | 36 | 18 | 07/26/10 09:49:15 | 12.76 | 7.55 | 7.45 | 47131 | 30.61 |
| 19830-013 | 3 | 37 | 18 | 07/26/10 09:49:33 | 12.73 | 7.00 | 7.38 | 47132 | 30.61 |
| 19830-009 | 3 | 38 | 18 | 07/26/10 09:49:54 | 12.82 | 6.87 | 7.47 | 47092 | 30.58 |
| 19830-017 | 3 | 39 | 18 | 07/26/10 09:50:04 | 12.84 | 7.29 | 7.43 | 47036 | 30.55 |
| 19830-016 | 3 | 40 | 18 | 07/26/10 09:50:21 | 12.73 | 7.20 | 7.42 | 47095 | 30.58 |
| 19830-000 | 3 | 41 | 18 | 07/26/10 09:50:34 | 12.71 | 7.59 | 7.53 | 47062 | 30.56 |
| 19830-010 | 3 | 42 | 18 | 07/26/10 09:50:49 | 12.73 | 8.04 | 7.50 | 47052 | 30.55 |
| 19830-008 | 3 | 43 | 18 | 07/26/10 09:51:04 | 12.65 | 8.00 | 7.53 | 47120 | 30.60 |
| 19830-014 | 3 | 44 | 18 | 07/26/10 09:51:17 | 12.67 | 7.95 | 7.54 | 47074 | 30.57 |
| 19830-004 | 3 | 45 | 18 | 07/26/10 09:51:29 | 12.64 | 7.73 | 7.47 | 47088 | 30.57 |
| 19830-006 | 3 | 46 | 18 | 07/26/10 09:51:42 | 12.65 | 7.34 | 7.43 | 47078 | 30.57 |
| 19830-005 | 3 | 47 | 18 | 07/26/10 09:51:56 | 12.62 | 7.19 | 7.50 | 47099 | 30.58 |
| 19830-011 | 3 | 48 | 18 | 07/26/10 09:52:09 | 12.44 | 7.44 | 7.51 | 47136 | 30.60 |
| 19830-002 | 3 | 49 | 18 | 07/26/10 09:52:25 | 12.50 | 7.24 | 7.48 | 47131 | 30.60 |
| 19830-012 | 3 | 50 | 18 | 07/26/10 09:52:42 | 12.58 | 7.05 | 7.41 | 47138 | 30.61 |
| 19830-001 | 3 | 51 | 18 | 07/26/10 09:53:17 | 12.37 | 7.59 | 7.62 | 47238 | 30.67 |
| 19830-003 | 3 | 52 | 18 | 07/26/10 09:53:31 | 12.36 | 7.84 | 7.67 | 47213 | 30.65 |
| 19830-007 | 3 | 53 | 18 | 07/26/10 09:53:43 | 12.39 | 8.11 | 7.57 | 47174 | 30.63 |
| 19830-015 | 3 | 54 | 18 | 07/26/10 09:53:54 | 12.40 | 7.92 | 7.56 | 47159 | 30.62 |
| 19830-006 | 4 | 55 | 18 | 07/26/10 09:54:03 | 12.35 | 7.99 | 7.62 | 47156 | 30.61 |
| 19830-011 | 4 | 56 | 18 | 07/26/10 09:54:13 | 12.29 | 8.10 | 7.65 | 47189 | 30.63 |
| 19830-012 | 4 | 57 | 18 | 07/26/10 09:54:22 | 12.25 | 8.13 | 7.71 | 47160 | 30.61 |
| 19830-010 | 4 | 58 | 18 | 07/26/10 09:54:31 | 12.19 | 8.26 | 7.74 | 47200 | 30.64 |
| 19830-015 | 4 | 59 | 18 | 07/26/10 09:54:55 | 12.07 | 8.19 | 7.62 | 47220 | 30.65 |
| 19830-009 | 4 | 60 | 18 | 07/26/10 09:55:04 | 12.03 | 8.07 | 7.67 | 47259 | 30.67 |
| 19830-001 | 4 | 61 | 18 | 07/26/10 09:55:15 | 12.05 | 8.11 | 7.69 | 47378 | 30.76 |
| 19830-016 | 4 | 62 | 18 | 07/26/10 09:55:31 | 12.24 | 7.91 | 7.54 | 47182 | 30.63 |
| 19830-008 | 4 | 63 | 18 | 07/26/10 09:55:45 | 12.40 | 7.77 | 7.65 | 47248 | 30.68 |
| 19830-004 | 4 | 64 | 18 | 07/26/10 09:55:59 | 12.54 | 7.90 | 7.62 | 47250 | 30.69 |
| 19830-007 | 4 | 65 | 18 | 07/26/10 09:56:14 | 12.42 | 7.75 | 7.49 | 47109 | 30.58 |
| 19830-014 | 4 | 66 | 18 | 07/26/10 09:56:24 | 12.34 | 7.79 | 7.45 | 47140 | 30.60 |
| 19830-000 | 4 | 67 | 18 | 07/26/10 09:56:35 | 12.31 | 7.60 | 7.43 | 47105 | 30.57 |
| 19830-017 | 4 | 68 | 18 | 07/26/10 09:56:46 | 12.29 | 7.56 | 7.40 | 47122 | 30.59 |
| 19830-013 | 4 | 69 | 18 | 07/26/10 09:56:55 | 12.28 | 7.53 | 7.41 | 47142 | 30.60 |
| 19830-002 | 4 | 70 | 18 | 07/26/10 09:57:03 | 12.29 | 7.61 | 7.49 | 47151 | 30.61 |
| 19830-005 | 4 | 71 | 18 | 07/26/10 09:57:11 | 12.29 | 7.71 | 7.57 | 47154 | 30.61 |
| 19830-003 | 4 | 72 | 18 | 07/26/10 09:57:20 | 12.31 | 7.83 | 7.58 | 47150 | 30.61 |
| 19830-016 | 5 | 73 | 18 | 07/26/10 09:57:31 | 12.31 | 7.96 | 7.54 | 47131 | 30.59 |
| 19830-003 | 5 | 74 | 18 | 07/26/10 09:57:46 | 12.31 | 7.87 | 7.46 | 47155 | 30.61 |
| 19830-000 | 5 | 75 | 18 | 07/26/10 09:58:05 | 12.38 | 7.70 | 7.51 | 47084 | 30.56 |
| 19830-013 | 5 | 76 | 18 | 07/26/10 09:58:16 | 12.43 | 7.89 | 7.49 | 47110 | 30.58 |
| 19830-001 | 5 | 77 | 18 | 07/26/10 09:58:26 | 12.48 | 7.86 | 7.48 | 47167 | 30.63 |
| 19830-002 | 5 | 78 | 18 | 07/26/10 09:58:48 | 12.60 | 7.74 | 7.51 | 47106 | 30.59 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-004 | 5 | 79 | 18 | 07/26/10 09:59:03 | 12.65 | 7.54 | 7.49 | 47104 | 30.59 |
| 19830-012 | 5 | 80 | 18 | 07/26/10 09:59:16 | 12.68 | 7.64 | 7.56 | 47175 | 30.64 |
| 19830-005 | 5 | 81 | 18 | 07/26/10 09:59:30 | 12.49 | 7.98 | 7.62 | 47047 | 30.54 |
| 19830-011 | 5 | 82 | 18 | 07/26/10 09:59:39 | 12.36 | 7.93 | 7.63 | 47095 | 30.57 |
| 19830-010 | 5 | 83 | 18 | 07/26/10 09:59:51 | 12.30 | 7.89 | 7.65 | 47185 | 30.63 |
| 19830-017 | 5 | 84 | 18 | 07/26/10 10:00:01 | 12.30 | 7.91 | 7.56 | 47100 | 30.57 |
| 19830-009 | 5 | 85 | 18 | 07/26/10 10:00:10 | 12.29 | 7.66 | 7.51 | 47210 | 30.65 |
| 19830-006 | 5 | 86 | 18 | 07/26/10 10:00:23 | 12.33 | 7.55 | 7.52 | 47173 | 30.62 |
| 19830-008 | 5 | 87 | 18 | 07/26/10 10:00:33 | 12.35 | 7.69 | 7.57 | 47148 | 30.61 |
| 19830-007 | 5 | 88 | 18 | 07/26/10 10:00:45 | 12.34 | 7.96 | 7.58 | 47194 | 30.64 |
| 19830-014 | 5 | 89 | 18 | 07/26/10 10:00:57 | 12.31 | 8.09 | 7.56 | 47194 | 30.64 |
| 19830-015 | 5 | 90 | 18 | 07/26/10 10:01:05 | 12.32 | 8.13 | 7.58 | 47177 | 30.63 |
| 19830-005 | 6 | 91 | 18 | 07/26/10 10:01:16 | 12.34 | 8.11 | 7.62 | 47167 | 30.62 |
| 19830-007 | 6 | 92 | 18 | 07/26/10 10:01:27 | 12.38 | 8.10 | 7.59 | 47186 | 30.64 |
| 19830-002 | 6 | 93 | 18 | 07/26/10 10:01:39 | 12.44 | 8.07 | 7.53 | 47178 | 30.63 |
| 19830-009 | 6 | 94 | 18 | 07/26/10 10:01:50 | 12.49 | 7.93 | 7.56 | 47184 | 30.64 |
| 19830-013 | 6 | 95 | 18 | 07/26/10 10:02:01 | 12.53 | 7.72 | 7.57 | 47179 | 30.64 |
| 19830-004 | 6 | 96 | 18 | 07/26/10 10:02:08 | 12.56 | 7.74 | 7.55 | 47275 | 30.71 |
| 19830-012 | 6 | 97 | 18 | 07/26/10 10:02:29 | 12.44 | 8.07 | 7.61 | 47160 | 30.62 |
| 19830-015 | 6 | 98 | 18 | 07/26/10 10:02:46 | 12.31 | 8.14 | 7.63 | 47169 | 30.62 |
| 19830-014 | 6 | 99 | 18 | 07/26/10 10:02:59 | 12.27 | 7.90 | 7.61 | 47233 | 30.66 |
| 19830-003 | 6 | 100 | 18 | 07/26/10 10:03:14 | 12.26 | 7.89 | 7.59 | 47276 | 30.70 |
| 19830-010 | 6 | 101 | 18 | 07/26/10 10:03:26 | 12.26 | 8.08 | 7.62 | 47276 | 30.70 |
| 19830-000 | 6 | 102 | 18 | 07/26/10 10:03:38 | 12.23 | 8.27 | 7.63 | 47247 | 30.67 |
| 19830-016 | 6 | 103 | 18 | 07/26/10 10:03:52 | 12.23 | 8.34 | 7.63 | 47260 | 30.68 |
| 19830-001 | 6 | 104 | 18 | 07/26/10 10:04:03 | 12.22 | 8.22 | 7.69 | 47322 | 30.73 |
| 19830-017 | 6 | 105 | 18 | 07/26/10 10:04:22 | 12.19 | 8.30 | 7.64 | 47200 | 30.64 |
| 19830-008 | 6 | 106 | 18 | 07/26/10 10:04:36 | 12.17 | 8.39 | 7.74 | 47247 | 30.67 |
| 19830-011 | 6 | 107 | 18 | 07/26/10 10:04:48 | 12.23 | 8.44 | 7.71 | 47247 | 30.67 |
| 19830-006 | 6 | 108 | 18 | 07/26/10 10:05:00 | 12.32 | 8.24 | 7.64 | 47342 | 30.75 |
| 19830-015 | 7 | 109 | 18 | 07/26/10 10:05:08 | 12.41 | 8.26 | 7.64 | 47426 | 30.81 |
| 19830-017 | 7 | 110 | 18 | 07/26/10 10:05:23 | 12.61 | 8.19 | 7.64 | 47314 | 30.74 |
| 19830-003 | 7 | 111 | 18 | 07/26/10 10:05:43 | 12.74 | 8.10 | 7.58 | 47280 | 30.72 |
| 19830-008 | 7 | 112 | 18 | 07/26/10 10:05:55 | 12.79 | 8.00 | 7.62 | 47325 | 30.75 |
| 19830-006 | 7 | 113 | 18 | 07/26/10 10:06:23 | 12.65 | 8.25 | 7.59 | 47057 | 30.55 |
| 19830-012 | 7 | 114 | 18 | 07/26/10 10:06:33 | 12.62 | 8.20 | 7.59 | 47015 | 30.52 |
| 19830-004 | 7 | 115 | 18 | 07/26/10 10:06:45 | 12.56 | 8.15 | 7.61 | 47051 | 30.55 |
| 19830-011 | 7 | 116 | 18 | 07/26/10 10:06:59 | 12.50 | 8.14 | 7.62 | 47036 | 30.53 |
| 19830-014 | 7 | 117 | 18 | 07/26/10 10:07:13 | 12.45 | 8.07 | 7.67 | 47093 | 30.57 |
| 19830-005 | 7 | 118 | 18 | 07/26/10 10:07:25 | 12.44 | 8.24 | 7.64 | 47054 | 30.54 |
| 19830-001 | 7 | 119 | 18 | 07/26/10 10:07:37 | 12.44 | 8.28 | 7.64 | 47060 | 30.55 |
| 19830-000 | 7 | 120 | 18 | 07/26/10 10:07:55 | 12.43 | 8.30 | 7.63 | 47033 | 30.53 |
| 19830-009 | 7 | 121 | 18 | 07/26/10 10:08:07 | 12.29 | 8.46 | 7.61 | 47123 | 30.59 |
| 19830-010 | 7 | 122 | 18 | 07/26/10 10:08:18 | 12.22 | 8.25 | 7.60 | 47061 | 30.54 |
| 19830-007 | 7 | 123 | 18 | 07/26/10 10:08:25 | 12.24 | 8.10 | 7.58 | 47212 | 30.65 |
| 19830-002 | 7 | 124 | 18 | 07/26/10 10:08:49 | 12.35 | 7.77 | 7.55 | 47167 | 30.62 |
| 19830-013 | 7 | 125 | 18 | 07/26/10 10:08:57 | 12.37 | 7.71 | 7.56 | 47259 | 30.69 |
| 19830-016 | 7 | 126 | 18 | 07/26/10 10:09:07 | 12.48 | 7.81 | 7.54 | 47272 | 30.70 |
| 19830-017 | 8 | 127 | 18 | 07/26/10 10:09:17 | 12.62 | 7.88 | 7.54 | 47218 | 30.67 |
| 19830-013 | 8 | 128 | 18 | 07/26/10 10:09:27 | 12.74 | 7.86 | 7.54 | 47257 | 30.70 |
| 19830-010 | 8 | 129 | 18 | 07/26/10 10:09:40 | 12.72 | 7.97 | 7.62 | 47061 | 30.56 |
| 19830-007 | 8 | 130 | 18 | 07/26/10 10:09:53 | 12.67 | 8.09 | 7.58 | 47039 | 30.54 |
| 19830-011 | 8 | 131 | 18 | 07/26/10 10:10:03 | 12.59 | 8.05 | 7.56 | 47053 | 30.55 |
| 19830-002 | 8 | 132 | 18 | 07/26/10 10:10:17 | 12.55 | 7.36 | 7.57 | 47112 | 30.59 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-004 | 8 | 133 | 18 | 07/26/10 10:10:28 | 12.56 | 7.09 | 7.55 | 47066 | 30.56 |
| 19830-003 | 8 | 134 | 18 | 07/26/10 10:10:37 | 12.55 | 7.25 | 7.55 | 47068 | 30.56 |
| 19830-005 | 8 | 135 | 18 | 07/26/10 10:10:50 | 12.49 | 7.67 | 7.47 | 47056 | 30.55 |
| 19830-012 | 8 | 136 | 18 | 07/26/10 10:10:58 | 12.44 | 7.60 | 7.48 | 47087 | 30.57 |
| 19830-006 | 8 | 137 | 18 | 07/26/10 10:11:15 | 12.36 | 7.70 | 7.53 | 47221 | 30.66 |
| 19830-001 | 8 | 138 | 18 | 07/26/10 10:11:26 | 12.34 | 7.77 | 7.56 | 47249 | 30.68 |
| 19830-014 | 8 | 139 | 18 | 07/26/10 10:11:38 | 12.39 | 7.72 | 7.61 | 47195 | 30.64 |
| 19830-000 | 8 | 140 | 18 | 07/26/10 10:11:47 | 12.42 | 7.48 | 7.61 | 47190 | 30.64 |
| 19830-009 | 8 | 141 | 18 | 07/26/10 10:11:57 | 12.48 | 7.64 | 7.65 | 47245 | 30.68 |
| 19830-008 | 8 | 142 | 18 | 07/26/10 10:12:07 | 12.53 | 7.94 | 7.70 | 47251 | 30.69 |
| 19830-015 | 8 | 143 | 18 | 07/26/10 10:12:17 | 12.59 | 8.10 | 7.70 | 47287 | 30.72 |
| 19830-016 | 8 | 144 | 18 | 07/26/10 10:12:28 | 12.72 | 8.05 | 7.61 | 47284 | 30.72 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 19 | 07/27/10 09:40:50 | 12.94 | 8.64 | 7.59 | 46105 | 29.88 |
| 19830-016 | 1 | 2 | 19 | 07/27/10 09:41:29 | 12.84 | 8.24 | 7.54 | 45987 | 29.79 |
| 19830-015 | 1 | 3 | 19 | 07/27/10 09:41:53 | 12.80 | 8.08 | 7.56 | 46098 | 29.87 |
| 19830-017 | 1 | 4 | 19 | 07/27/10 09:42:13 | 12.82 | 7.76 | 7.47 | 46072 | 29.85 |
| 19830-001 | 1 | 5 | 19 | 07/27/10 09:42:30 | 12.84 | 7.50 | 7.51 | 46146 | 29.90 |
| 19830-011 | 1 | 6 | 19 | 07/27/10 09:42:44 | 12.83 | 7.45 | 7.53 | 46113 | 29.88 |
| 19830-014 | 1 | 7 | 19 | 07/27/10 09:42:57 | 12.80 | 7.65 | 7.47 | 46097 | 29.87 |
| 19830-009 | 1 | 8 | 19 | 07/27/10 09:43:15 | 12.74 | 7.11 | 7.48 | 46150 | 29.90 |
| 19830-012 | 1 | 9 | 19 | 07/27/10 09:43:31 | 12.76 | 6.96 | 7.58 | 46151 | 29.90 |
| 19830-010 | 1 | 10 | 19 | 07/27/10 09:43:45 | 12.67 | 7.10 | 7.65 | 46103 | 29.87 |
| 19830-008 | 1 | 11 | 19 | 07/27/10 09:44:01 | 12.59 | 7.75 | 7.80 | 46124 | 29.88 |
| 19830-006 | 1 | 12 | 19 | 07/27/10 09:44:12 | 12.58 | 7.94 | 7.76 | 46114 | 29.87 |
| 19830-004 | 1 | 13 | 19 | 07/27/10 09:44:25 | 12.60 | 8.16 | 7.65 | 46120 | 29.88 |
| 19830-013 | 1 | 14 | 19 | 07/27/10 09:44:40 | 12.59 | 8.18 | 7.63 | 46112 | 29.87 |
| 19830-000 | 1 | 15 | 19 | 07/27/10 09:44:50 | 12.55 | 8.16 | 7.61 | 46108 | 29.87 |
| 19830-005 | 1 | 16 | 19 | 07/27/10 09:45:02 | 12.51 | 8.26 | 7.68 | 46185 | 29.92 |
| 19830-007 | 1 | 17 | 19 | 07/27/10 09:45:13 | 12.47 | 8.43 | 7.65 | 46242 | 29.96 |
| 19830-003 | 1 | 18 | 19 | 07/27/10 09:45:22 | 12.52 | 8.46 | 7.59 | 46259 | 29.97 |
| 19830-009 | 2 | 19 | 19 | 07/27/10 09:45:38 | 12.68 | 8.40 | 7.59 | 46234 | 29.96 |
| 19830-016 | 2 | 20 | 19 | 07/27/10 09:45:52 | 12.76 | 8.26 | 7.63 | 46119 | 29.88 |
| 19830-007 | 2 | 21 | 19 | 07/27/10 09:46:14 | 12.78 | 7.71 | 7.44 | 46036 | 29.82 |
| 19830-015 | 2 | 22 | 19 | 07/27/10 09:46:27 | 12.77 | 7.39 | 7.46 | 46056 | 29.84 |
| 19830-008 | 2 | 23 | 19 | 07/27/10 09:46:38 | 12.77 | 7.57 | 7.63 | 46066 | 29.84 |
| 19830-002 | 2 | 24 | 19 | 07/27/10 09:46:50 | 12.75 | 7.89 | 7.63 | 46043 | 29.83 |
| 19830-012 | 2 | 25 | 19 | 07/27/10 09:47:00 | 12.70 | 7.79 | 7.57 | 46056 | 29.83 |
| 19830-004 | 2 | 26 | 19 | 07/27/10 09:47:11 | 12.71 | 7.68 | 7.52 | 46065 | 29.84 |
| 19830-000 | 2 | 27 | 19 | 07/27/10 09:47:21 | 12.63 | 7.69 | 7.48 | 46014 | 29.80 |
| 19830-003 | 2 | 28 | 19 | 07/27/10 09:47:32 | 12.55 | 7.98 | 7.51 | 46061 | 29.83 |
| 19830-011 | 2 | 29 | 19 | 07/27/10 09:47:41 | 12.55 | 8.13 | 7.57 | 46090 | 29.85 |
| 19830-017 | 2 | 30 | 19 | 07/27/10 09:47:52 | 12.56 | 8.14 | 7.58 | 46056 | 29.83 |
| 19830-014 | 2 | 31 | 19 | 07/27/10 09:48:08 | 12.52 | 7.93 | 7.49 | 46080 | 29.84 |
| 19830-001 | 2 | 32 | 19 | 07/27/10 09:48:23 | 12.47 | 7.31 | 7.52 | 46112 | 29.87 |
| 19830-013 | 2 | 33 | 19 | 07/27/10 09:48:35 | 12.47 | 6.91 | 7.50 | 46169 | 29.91 |
| 19830-010 | 2 | 34 | 19 | 07/27/10 09:48:50 | 12.55 | 7.32 | 7.56 | 46111 | 29.87 |
| 19830-006 | 2 | 35 | 19 | 07/27/10 09:49:14 | 12.74 | 7.78 | 7.48 | 46158 | 29.91 |
| 19830-005 | 2 | 36 | 19 | 07/27/10 09:49:26 | 12.74 | 7.63 | 7.45 | 46126 | 29.89 |
| 19830-013 | 3 | 37 | 19 | 07/27/10 09:49:39 | 12.73 | 7.30 | 7.38 | 46120 | 29.88 |
| 19830-009 | 3 | 38 | 19 | 07/27/10 09:49:50 | 12.76 | 6.93 | 7.40 | 46144 | 29.90 |
| 19830-017 | 3 | 39 | 19 | 07/27/10 09:50:01 | 12.80 | 7.22 | 7.39 | 46067 | 29.85 |
| 19830-016 | 3 | 40 | 19 | 07/27/10 09:50:13 | 12.77 | 7.00 | 7.37 | 46065 | 29.84 |
| 19830-000 | 3 | 41 | 19 | 07/27/10 09:50:21 | 12.76 | 7.04 | 7.44 | 46018 | 29.81 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 3 | 42 | 19 | 07/27/10 09:50:35 | 12.74 | 7.75 | 7.51 | 46051 | 29.83 |
| 19830-008 | 3 | 43 | 19 | 07/27/10 09:50:46 | 12.69 | 7.98 | 7.56 | 46064 | 29.84 |
| 19830-014 | 3 | 44 | 19 | 07/27/10 09:50:55 | 12.67 | 8.05 | 7.59 | 46032 | 29.82 |
| 19830-004 | 3 | 45 | 19 | 07/27/10 09:51:06 | 12.64 | 7.99 | 7.53 | 46040 | 29.82 |
| 19830-006 | 3 | 46 | 19 | 07/27/10 09:51:16 | 12.64 | 7.73 | 7.46 | 46056 | 29.83 |
| 19830-005 | 3 | 47 | 19 | 07/27/10 09:51:25 | 12.63 | 7.52 | 7.53 | 46046 | 29.82 |
| 19830-011 | 3 | 48 | 19 | 07/27/10 09:51:36 | 12.46 | 7.61 | 7.56 | 46104 | 29.86 |
| 19830-002 | 3 | 49 | 19 | 07/27/10 09:51:52 | 12.47 | 7.64 | 7.52 | 46111 | 29.87 |
| 19830-012 | 3 | 50 | 19 | 07/27/10 09:52:05 | 12.56 | 7.42 | 7.47 | 46131 | 29.88 |
| 19830-001 | 3 | 51 | 19 | 07/27/10 09:52:25 | 12.40 | 7.62 | 7.59 | 46203 | 29.93 |
| 19830-003 | 3 | 52 | 19 | 07/27/10 09:52:43 | 12.38 | 8.20 | 7.70 | 46204 | 29.93 |
| 19830-007 | 3 | 53 | 19 | 07/27/10 09:52:55 | 12.39 | 8.49 | 7.61 | 46161 | 29.90 |
| 19830-015 | 3 | 54 | 19 | 07/27/10 09:53:08 | 12.40 | 8.21 | 7.63 | 46133 | 29.88 |
| 19830-006 | 4 | 55 | 19 | 07/27/10 09:53:20 | 12.35 | 8.33 | 7.69 | 46156 | 29.89 |
| 19830-011 | 4 | 56 | 19 | 07/27/10 09:53:33 | 12.31 | 8.47 | 7.73 | 46015 | 29.79 |
| 19830-012 | 4 | 57 | 19 | 07/27/10 09:53:44 | 12.24 | 8.45 | 7.79 | 46183 | 29.91 |
| 19830-010 | 4 | 58 | 19 | 07/27/10 09:53:53 | 12.19 | 8.56 | 7.81 | 46208 | 29.92 |
| 19830-015 | 4 | 59 | 19 | 07/27/10 09:54:07 | 12.11 | 8.65 | 7.70 | 46196 | 29.91 |
| 19830-009 | 4 | 60 | 19 | 07/27/10 09:54:18 | 12.04 | 8.54 | 7.75 | 46257 | 29.95 |
| 19830-001 | 4 | 61 | 19 | 07/27/10 09:54:30 | 12.07 | 8.49 | 7.75 | 46361 | 30.03 |
| 19830-016 | 4 | 62 | 19 | 07/27/10 09:54:43 | 12.22 | 8.31 | 7.62 | 46235 | 29.94 |
| 19830-008 | 4 | 63 | 19 | 07/27/10 09:54:58 | 12.39 | 8.10 | 7.71 | 46239 | 29.95 |
| 19830-004 | 4 | 64 | 19 | 07/27/10 09:55:07 | 12.47 | 8.18 | 7.70 | 46304 | 30.00 |
| 19830-007 | 4 | 65 | 19 | 07/27/10 09:55:24 | 12.39 | 8.11 | 7.53 | 46140 | 29.88 |
| 19830-014 | 4 | 66 | 19 | 07/27/10 09:55:34 | 12.35 | 8.03 | 7.49 | 46119 | 29.87 |
| 19830-000 | 4 | 67 | 19 | 07/27/10 09:55:46 | 12.29 | 7.70 | 7.45 | 46117 | 29.86 |
| 19830-017 | 4 | 68 | 19 | 07/27/10 09:55:56 | 12.28 | 7.66 | 7.42 | 46117 | 29.86 |
| 19830-013 | 4 | 69 | 19 | 07/27/10 09:56:05 | 12.28 | 7.68 | 7.43 | 46131 | 29.87 |
| 19830-002 | 4 | 70 | 19 | 07/27/10 09:56:15 | 12.26 | 7.81 | 7.52 | 46177 | 29.90 |
| 19830-005 | 4 | 71 | 19 | 07/27/10 09:56:25 | 12.29 | 7.96 | 7.60 | 46137 | 29.88 |
| 19830-003 | 4 | 72 | 19 | 07/27/10 09:56:38 | 12.30 | 8.11 | 7.62 | 46161 | 29.89 |
| 19830-016 | 5 | 73 | 19 | 07/27/10 09:56:49 | 12.28 | 8.23 | 7.57 | 46146 | 29.88 |
| 19830-003 | 5 | 74 | 19 | 07/27/10 09:57:02 | 12.29 | 8.14 | 7.51 | 46143 | 29.88 |
| 19830-000 | 5 | 75 | 19 | 07/27/10 09:57:14 | 12.33 | 7.85 | 7.50 | 46089 | 29.84 |
| 19830-013 | 5 | 76 | 19 | 07/27/10 09:57:25 | 12.37 | 7.94 | 7.49 | 46092 | 29.85 |
| 19830-001 | 5 | 77 | 19 | 07/27/10 09:57:38 | 12.42 | 8.00 | 7.52 | 46111 | 29.86 |
| 19830-002 | 5 | 78 | 19 | 07/27/10 09:57:52 | 12.49 | 8.15 | 7.53 | 46132 | 29.88 |
| 19830-004 | 5 | 79 | 19 | 07/27/10 09:58:04 | 12.57 | 7.90 | 7.50 | 46109 | 29.87 |
| 19830-012 | 5 | 80 | 19 | 07/27/10 09:58:17 | 12.65 | 7.88 | 7.58 | 46138 | 29.89 |
| 19830-005 | 5 | 81 | 19 | 07/27/10 09:58:28 | 12.49 | 8.17 | 7.67 | 46066 | 29.83 |
| 19830-011 | 5 | 82 | 19 | 07/27/10 09:58:37 | 12.37 | 8.17 | 7.67 | 46065 | 29.83 |
| 19830-010 | 5 | 83 | 19 | 07/27/10 09:58:47 | 12.31 | 8.11 | 7.66 | 46159 | 29.89 |
| 19830-017 | 5 | 84 | 19 | 07/27/10 09:58:57 | 12.30 | 8.13 | 7.59 | 46095 | 29.85 |
| 19830-009 | 5 | 85 | 19 | 07/27/10 09:59:07 | 12.28 | 7.88 | 7.53 | 46192 | 29.92 |
| 19830-006 | 5 | 86 | 19 | 07/27/10 09:59:17 | 12.31 | 7.68 | 7.55 | 46190 | 29.92 |
| 19830-008 | 5 | 87 | 19 | 07/27/10 09:59:30 | 12.33 | 7.86 | 7.64 | 46155 | 29.89 |
| 19830-007 | 5 | 88 | 19 | 07/27/10 09:59:41 | 12.35 | 8.08 | 7.64 | 46186 | 29.91 |
| 19830-014 | 5 | 89 | 19 | 07/27/10 09:59:56 | 12.31 | 8.29 | 7.63 | 46172 | 29.90 |
| 19830-015 | 5 | 90 | 19 | 07/27/10 10:00:07 | 12.31 | 8.30 | 7.64 | 46161 | 29.89 |
| 19830-005 | 6 | 91 | 19 | 07/27/10 10:00:18 | 12.32 | 8.26 | 7.69 | 46149 | 29.89 |
| 19830-007 | 6 | 92 | 19 | 07/27/10 10:00:30 | 12.35 | 8.29 | 7.64 | 46164 | 29.90 |
| 19830-002 | 6 | 93 | 19 | 07/27/10 10:00:40 | 12.40 | 8.29 | 7.57 | 46181 | 29.91 |
| 19830-009 | 6 | 94 | 19 | 07/27/10 10:00:52 | 12.45 | 8.16 | 7.59 | 46171 | 29.91 |
| 19830-013 | 6 | 95 | 19 | 07/27/10 10:01:04 | 12.49 | 7.95 | 7.59 | 46173 | 29.91 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-004 | 6 | 96 | 19 | 07/27/10 10:01:15 | 12.54 | 8.04 | 7.59 | 46245 | 29.96 |
| 19830-012 | 6 | 97 | 19 | 07/27/10 10:01:33 | 12.44 | 8.26 | 7.65 | 46166 | 29.90 |
| 19830-015 | 6 | 98 | 19 | 07/27/10 10:01:41 | 12.37 | 8.38 | 7.65 | 46122 | 29.87 |
| 19830-014 | 6 | 99 | 19 | 07/27/10 10:01:54 | 12.29 | 8.24 | 7.64 | 46208 | 29.93 |
| 19830-003 | 6 | 100 | 19 | 07/27/10 10:02:04 | 12.27 | 8.18 | 7.64 | 46270 | 29.97 |
| 19830-010 | 6 | 101 | 19 | 07/27/10 10:02:15 | 12.27 | 8.28 | 7.67 | 46282 | 29.98 |
| 19830-000 | 6 | 102 | 19 | 07/27/10 10:02:22 | 12.24 | 8.43 | 7.68 | 46248 | 29.95 |
| 19830-016 | 6 | 103 | 19 | 07/27/10 10:02:32 | 12.24 | 8.54 | 7.65 | 46263 | 29.97 |
| 19830-001 | 6 | 104 | 19 | 07/27/10 10:02:41 | 12.25 | 8.46 | 7.68 | 46304 | 30.00 |
| 19830-017 | 6 | 105 | 19 | 07/27/10 10:02:50 | 12.20 | 8.43 | 7.70 | 46225 | 29.94 |
| 19830-008 | 6 | 106 | 19 | 07/27/10 10:03:01 | 12.17 | 8.51 | 7.76 | 46255 | 29.96 |
| 19830-011 | 6 | 107 | 19 | 07/27/10 10:03:11 | 12.20 | 8.62 | 7.78 | 46289 | 29.98 |
| 19830-006 | 6 | 108 | 19 | 07/27/10 10:03:21 | 12.31 | 8.53 | 7.70 | 46343 | 30.03 |
| 19830-015 | 7 | 109 | 19 | 07/27/10 10:03:31 | 12.44 | 8.46 | 7.66 | 46370 | 30.05 |
| 19830-017 | 7 | 110 | 19 | 07/27/10 10:03:39 | 12.55 | 8.37 | 7.65 | 46376 | 30.06 |
| 19830-003 | 7 | 111 | 19 | 07/27/10 10:03:49 | 12.67 | 8.29 | 7.64 | 46349 | 30.04 |
| 19830-008 | 7 | 112 | 19 | 07/27/10 10:03:59 | 12.76 | 8.23 | 7.67 | 46370 | 30.06 |
| 19830-006 | 7 | 113 | 19 | 07/27/10 10:04:09 | 12.69 | 8.35 | 7.67 | 46005 | 29.80 |
| 19830-012 | 7 | 114 | 19 | 07/27/10 10:04:21 | 12.59 | 8.44 | 7.64 | 45957 | 29.76 |
| 19830-004 | 7 | 115 | 19 | 07/27/10 10:04:29 | 12.51 | 8.42 | 7.62 | 46056 | 29.83 |
| 19830-011 | 7 | 116 | 19 | 07/27/10 10:04:37 | 12.47 | 8.41 | 7.62 | 46002 | 29.79 |
| 19830-014 | 7 | 117 | 19 | 07/27/10 10:04:47 | 12.41 | 8.34 | 7.66 | 46080 | 29.84 |
| 19830-005 | 7 | 118 | 19 | 07/27/10 10:04:55 | 12.40 | 8.37 | 7.67 | 46028 | 29.80 |
| 19830-001 | 7 | 119 | 19 | 07/27/10 10:05:04 | 12.40 | 8.42 | 7.67 | 45999 | 29.78 |
| 19830-000 | 7 | 120 | 19 | 07/27/10 10:05:12 | 12.41 | 8.42 | 7.66 | 46027 | 29.80 |
| 19830-009 | 7 | 121 | 19 | 07/27/10 10:05:22 | 12.30 | 8.50 | 7.64 | 46094 | 29.85 |
| 19830-010 | 7 | 122 | 19 | 07/27/10 10:05:33 | 12.23 | 8.37 | 7.62 | 46103 | 29.85 |
| 19830-007 | 7 | 123 | 19 | 07/27/10 10:05:43 | 12.24 | 8.18 | 7.55 | 46184 | 29.91 |
| 19830-002 | 7 | 124 | 19 | 07/27/10 10:05:55 | 12.30 | 8.01 | 7.52 | 46186 | 29.91 |
| 19830-013 | 7 | 125 | 19 | 07/27/10 10:06:05 | 12.34 | 7.94 | 7.55 | 46247 | 29.96 |
| 19830-016 | 7 | 126 | 19 | 07/27/10 10:06:15 | 12.46 | 8.02 | 7.56 | 46220 | 29.94 |
| 19830-017 | 8 | 127 | 19 | 07/27/10 10:06:27 | 12.59 | 8.02 | 7.53 | 46191 | 29.93 |
| 19830-013 | 8 | 128 | 19 | 07/27/10 10:06:38 | 12.72 | 7.95 | 7.55 | 46243 | 29.97 |
| 19830-010 | 8 | 129 | 19 | 07/27/10 10:06:52 | 12.68 | 8.09 | 7.65 | 46084 | 29.85 |
| 19830-007 | 8 | 130 | 19 | 07/27/10 10:07:03 | 12.65 | 8.28 | 7.63 | 46006 | 29.80 |
| 19830-011 | 8 | 131 | 19 | 07/27/10 10:07:19 | 12.56 | 7.90 | 7.51 | 46073 | 29.84 |
| 19830-002 | 8 | 132 | 19 | 07/27/10 10:07:29 | 12.51 | 7.15 | 7.52 | 46061 | 29.83 |
| 19830-004 | 8 | 133 | 19 | 07/27/10 10:07:39 | 12.50 | 6.90 | 7.53 | 46061 | 29.83 |
| 19830-003 | 8 | 134 | 19 | 07/27/10 10:07:47 | 12.51 | 7.08 | 7.53 | 46063 | 29.83 |
| 19830-005 | 8 | 135 | 19 | 07/27/10 10:07:56 | 12.48 | 7.49 | 7.49 | 46043 | 29.82 |
| 19830-012 | 8 | 136 | 19 | 07/27/10 10:08:05 | 12.44 | 7.55 | 7.49 | 46090 | 29.85 |
| 19830-006 | 8 | 137 | 19 | 07/27/10 10:08:14 | 12.39 | 7.58 | 7.55 | 46153 | 29.89 |
| 19830-001 | 8 | 138 | 19 | 07/27/10 10:08:22 | 12.34 | 7.75 | 7.57 | 46232 | 29.95 |
| 19830-014 | 8 | 139 | 19 | 07/27/10 10:08:30 | 12.36 | 7.81 | 7.59 | 46187 | 29.92 |
| 19830-000 | 8 | 140 | 19 | 07/27/10 10:08:40 | 12.40 | 7.66 | 7.58 | 46177 | 29.91 |
| 19830-009 | 8 | 141 | 19 | 07/27/10 10:08:48 | 12.45 | 7.74 | 7.59 | 46261 | 29.97 |
| 19830-008 | 8 | 142 | 19 | 07/27/10 10:08:57 | 12.51 | 7.94 | 7.64 | 46230 | 29.95 |
| 19830-015 | 8 | 143 | 19 | 07/27/10 10:09:05 | 12.58 | 8.08 | 7.68 | 46248 | 29.97 |
| 19830-016 | 8 | 144 | 19 | 07/27/10 10:09:14 | 12.70 | 8.10 | 7.63 | 46262 | 29.98 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 20 | 07/28/10 16:05:35 | 13.22 | 8.25 | 7.69 | 47618 | 30.98 |
| 19830-016 | 1 | 2 | 20 | 07/28/10 16:06:15 | 13.20 | 8.12 | 7.66 | 47776 | 31.09 |
| 19830-015 | 1 | 3 | 20 | 07/28/10 16:06:25 | 13.18 | 8.10 | 7.67 | 47781 | 31.10 |
| 19830-017 | 1 | 4 | 20 | 07/28/10 16:06:38 | 13.18 | 8.06 | 7.65 | 47805 | 31.11 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-001 | 1 | 5 | 20 | 07/28/10 16:06:53 | 13.14 | 7.94 | 7.64 | 47763 | 31.08 |
| 19830-011 | 1 | 6 | 20 | 07/28/10 16:07:07 | 13.16 | 7.85 | 7.67 | 47808 | 31.11 |
| 19830-014 | 1 | 7 | 20 | 07/28/10 16:07:19 | 13.16 | 7.85 | 7.65 | 47798 | 31.11 |
| 19830-009 | 1 | 8 | 20 | 07/28/10 16:07:33 | 13.09 | 7.68 | 7.66 | 47791 | 31.10 |
| 19830-012 | 1 | 9 | 20 | 07/28/10 16:07:44 | 13.08 | 7.66 | 7.69 | 47834 | 31.13 |
| 19830-010 | 1 | 10 | 20 | 07/28/10 16:07:58 | 13.06 | 7.79 | 7.70 | 47812 | 31.11 |
| 19830-008 | 1 | 11 | 20 | 07/28/10 16:08:06 | 13.06 | 7.91 | 7.71 | 47812 | 31.11 |
| 19830-006 | 1 | 12 | 20 | 07/28/10 16:08:16 | 13.08 | 8.00 | 7.72 | 47819 | 31.12 |
| 19830-004 | 1 | 13 | 20 | 07/28/10 16:08:28 | 13.02 | 8.09 | 7.70 | 47786 | 31.09 |
| 19830-013 | 1 | 14 | 20 | 07/28/10 16:08:36 | 13.00 | 8.11 | 7.69 | 47837 | 31.13 |
| 19830-000 | 1 | 15 | 20 | 07/28/10 16:08:46 | 13.02 | 8.09 | 7.68 | 47809 | 31.11 |
| 19830-005 | 1 | 16 | 20 | 07/28/10 16:08:56 | 12.99 | 8.19 | 7.71 | 47784 | 31.09 |
| 19830-007 | 1 | 17 | 20 | 07/28/10 16:09:08 | 12.94 | 8.29 | 7.70 | 47811 | 31.11 |
| 19830-003 | 1 | 18 | 20 | 07/28/10 16:09:23 | 12.98 | 8.29 | 7.67 | 47820 | 31.12 |
| 19830-009 | 2 | 19 | 20 | 07/28/10 16:09:43 | 13.08 | 8.27 | 7.68 | 47868 | 31.15 |
| 19830-016 | 2 | 20 | 20 | 07/28/10 16:09:57 | 13.15 | 8.10 | 7.70 | 47802 | 31.11 |
| 19830-007 | 2 | 21 | 20 | 07/28/10 16:10:11 | 13.19 | 7.93 | 7.63 | 47805 | 31.11 |
| 19830-015 | 2 | 22 | 20 | 07/28/10 16:10:22 | 13.20 | 7.71 | 7.62 | 47787 | 31.10 |
| 19830-008 | 2 | 23 | 20 | 07/28/10 16:10:31 | 13.19 | 7.71 | 7.68 | 47771 | 31.09 |
| 19830-002 | 2 | 24 | 20 | 07/28/10 16:10:41 | 13.19 | 7.84 | 7.68 | 47787 | 31.10 |
| 19830-012 | 2 | 25 | 20 | 07/28/10 16:10:52 | 13.16 | 7.80 | 7.65 | 47798 | 31.11 |
| 19830-004 | 2 | 26 | 20 | 07/28/10 16:11:01 | 13.16 | 7.77 | 7.64 | 47775 | 31.09 |
| 19830-000 | 2 | 27 | 20 | 07/28/10 16:11:12 | 13.09 | 7.81 | 7.65 | 47780 | 31.09 |
| 19830-003 | 2 | 28 | 20 | 07/28/10 16:11:22 | 13.08 | 8.00 | 7.67 | 47778 | 31.09 |
| 19830-011 | 2 | 29 | 20 | 07/28/10 16:11:30 | 13.07 | 8.10 | 7.68 | 47779 | 31.09 |
| 19830-017 | 2 | 30 | 20 | 07/28/10 16:11:42 | 13.09 | 8.06 | 7.66 | 47802 | 31.11 |
| 19830-014 | 2 | 31 | 20 | 07/28/10 16:11:57 | 13.05 | 7.94 | 7.63 | 47774 | 31.09 |
| 19830-001 | 2 | 32 | 20 | 07/28/10 16:12:10 | 13.00 | 7.67 | 7.60 | 47758 | 31.07 |
| 19830-013 | 2 | 33 | 20 | 07/28/10 16:12:18 | 12.99 | 7.50 | 7.63 | 47806 | 31.11 |
| 19830-010 | 2 | 34 | 20 | 07/28/10 16:12:31 | 13.02 | 7.67 | 7.67 | 47814 | 31.11 |
| 19830-006 | 2 | 35 | 20 | 07/28/10 16:12:54 | 13.10 | 7.93 | 7.63 | 47833 | 31.13 |
| 19830-005 | 2 | 36 | 20 | 07/28/10 16:13:09 | 13.17 | 7.74 | 7.63 | 47816 | 31.12 |
| 19830-013 | 3 | 37 | 20 | 07/28/10 16:13:21 | 13.15 | 7.56 | 7.62 | 47824 | 31.13 |
| 19830-009 | 3 | 38 | 20 | 07/28/10 16:13:29 | 13.17 | 7.49 | 7.62 | 47823 | 31.13 |
| 19830-017 | 3 | 39 | 20 | 07/28/10 16:13:38 | 13.21 | 7.56 | 7.61 | 47816 | 31.12 |
| 19830-016 | 3 | 40 | 20 | 07/28/10 16:13:52 | 13.15 | 7.67 | 7.61 | 47754 | 31.07 |
| 19830-000 | 3 | 41 | 20 | 07/28/10 16:14:03 | 13.18 | 7.76 | 7.64 | 47834 | 31.13 |
| 19830-010 | 3 | 42 | 20 | 07/28/10 16:14:12 | 13.19 | 7.95 | 7.64 | 47768 | 31.09 |
| 19830-008 | 3 | 43 | 20 | 07/28/10 16:14:29 | 13.04 | 8.01 | 7.66 | 47748 | 31.07 |
| 19830-014 | 3 | 44 | 20 | 07/28/10 16:14:39 | 13.06 | 7.98 | 7.67 | 47873 | 31.16 |
| 19830-004 | 3 | 45 | 20 | 07/28/10 16:14:50 | 13.12 | 7.88 | 7.65 | 47808 | 31.11 |
| 19830-006 | 3 | 46 | 20 | 07/28/10 16:14:59 | 13.13 | 7.77 | 7.62 | 47795 | 31.10 |
| 19830-005 | 3 | 47 | 20 | 07/28/10 16:15:11 | 13.12 | 7.42 | 7.64 | 47788 | 31.10 |
| 19830-011 | 3 | 48 | 20 | 07/28/10 16:15:18 | 13.03 | 7.49 | 7.68 | 47632 | 30.98 |
| 19830-002 | 3 | 49 | 20 | 07/28/10 16:15:26 | 12.98 | 7.68 | 7.69 | 47846 | 31.14 |
| 19830-012 | 3 | 50 | 20 | 07/28/10 16:15:35 | 12.99 | 7.78 | 7.66 | 47850 | 31.14 |
| 19830-001 | 3 | 51 | 20 | 07/28/10 16:15:47 | 12.84 | 7.74 | 7.68 | 47713 | 31.03 |
| 19830-003 | 3 | 52 | 20 | 07/28/10 16:15:56 | 12.79 | 7.90 | 7.72 | 47828 | 31.11 |
| 19830-007 | 3 | 53 | 20 | 07/28/10 16:16:08 | 12.81 | 8.11 | 7.66 | 47817 | 31.11 |
| 19830-015 | 3 | 54 | 20 | 07/28/10 16:16:20 | 12.84 | 8.01 | 7.70 | 47885 | 31.16 |
| 19830-006 | 4 | 55 | 20 | 07/28/10 16:16:32 | 12.82 | 8.17 | 7.74 | 47833 | 31.12 |
| 19830-011 | 4 | 56 | 20 | 07/28/10 16:16:45 | 12.79 | 8.25 | 7.76 | 47842 | 31.13 |
| 19830-012 | 4 | 57 | 20 | 07/28/10 16:16:56 | 12.78 | 8.20 | 7.77 | 47828 | 31.11 |
| 19830-010 | 4 | 58 | 20 | 07/28/10 16:17:08 | 12.71 | 8.34 | 7.78 | 47819 | 31.11 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-015 | 4 | 59 | 20 | 07/28/10 16:17:28 | 12.57 | 8.39 | 7.75 | 47830 | 31.11 |
| 19830-009 | 4 | 60 | 20 | 07/28/10 16:17:38 | 12.55 | 8.25 | 7.74 | 47854 | 31.12 |
| 19830-001 | 4 | 61 | 20 | 07/28/10 16:17:47 | 12.55 | 8.22 | 7.75 | 47876 | 31.14 |
| 19830-016 | 4 | 62 | 20 | 07/28/10 16:18:02 | 12.71 | 8.11 | 7.68 | 47891 | 31.16 |
| 19830-008 | 4 | 63 | 20 | 07/28/10 16:18:15 | 12.77 | 7.98 | 7.72 | 47862 | 31.14 |
| 19830-004 | 4 | 64 | 20 | 07/28/10 16:18:31 | 12.88 | 8.04 | 7.71 | 47868 | 31.15 |
| 19830-007 | 4 | 65 | 20 | 07/28/10 16:18:41 | 12.78 | 8.04 | 7.67 | 47848 | 31.13 |
| 19830-014 | 4 | 66 | 20 | 07/28/10 16:18:55 | 12.84 | 7.91 | 7.63 | 47845 | 31.13 |
| 19830-000 | 4 | 67 | 20 | 07/28/10 16:19:09 | 12.84 | 7.69 | 7.61 | 47830 | 31.12 |
| 19830-017 | 4 | 68 | 20 | 07/28/10 16:19:16 | 12.85 | 7.73 | 7.61 | 47846 | 31.13 |
| 19830-013 | 4 | 69 | 20 | 07/28/10 16:19:29 | 12.90 | 7.80 | 7.65 | 47833 | 31.12 |
| 19830-002 | 4 | 70 | 20 | 07/28/10 16:19:37 | 12.90 | 7.86 | 7.67 | 47807 | 31.10 |
| 19830-005 | 4 | 71 | 20 | 07/28/10 16:19:45 | 12.90 | 7.91 | 7.70 | 47820 | 31.11 |
| 19830-003 | 4 | 72 | 20 | 07/28/10 16:20:02 | 12.81 | 8.03 | 7.70 | 47788 | 31.09 |
| 19830-016 | 5 | 73 | 20 | 07/28/10 16:20:20 | 12.80 | 8.09 | 7.67 | 47831 | 31.12 |
| 19830-003 | 5 | 74 | 20 | 07/28/10 16:20:36 | 12.82 | 7.97 | 7.65 | 47836 | 31.12 |
| 19830-000 | 5 | 75 | 20 | 07/28/10 16:20:53 | 12.95 | 7.85 | 7.65 | 47848 | 31.14 |
| 19830-013 | 5 | 76 | 20 | 07/28/10 16:21:02 | 12.98 | 7.95 | 7.66 | 47820 | 31.12 |
| 19830-001 | 5 | 77 | 20 | 07/28/10 16:21:11 | 12.99 | 7.97 | 7.67 | 47636 | 30.98 |
| 19830-002 | 5 | 78 | 20 | 07/28/10 16:21:22 | 13.02 | 8.01 | 7.66 | 47814 | 31.11 |
| 19830-004 | 5 | 79 | 20 | 07/28/10 16:21:33 | 13.02 | 7.89 | 7.63 | 47829 | 31.12 |
| 19830-012 | 5 | 80 | 20 | 07/28/10 16:21:40 | 13.03 | 7.84 | 7.64 | 47795 | 31.10 |
| 19830-005 | 5 | 81 | 20 | 07/28/10 16:21:58 | 12.84 | 8.03 | 7.72 | 47793 | 31.09 |
| 19830-011 | 5 | 82 | 20 | 07/28/10 16:22:16 | 12.86 | 7.88 | 7.71 | 47844 | 31.13 |
| 19830-010 | 5 | 83 | 20 | 07/28/10 16:22:26 | 12.85 | 7.85 | 7.72 | 47815 | 31.11 |
| 19830-017 | 5 | 84 | 20 | 07/28/10 16:22:37 | 12.88 | 7.88 | 7.68 | 47901 | 31.17 |
| 19830-009 | 5 | 85 | 20 | 07/28/10 16:22:48 | 12.87 | 7.77 | 7.66 | 47828 | 31.12 |
| 19830-006 | 5 | 86 | 20 | 07/28/10 16:22:58 | 12.81 | 7.74 | 7.66 | 47765 | 31.07 |
| 19830-008 | 5 | 87 | 20 | 07/28/10 16:23:08 | 12.88 | 7.78 | 7.68 | 47803 | 31.10 |
| 19830-007 | 5 | 88 | 20 | 07/28/10 16:23:18 | 12.88 | 7.95 | 7.68 | 47802 | 31.10 |
| 19830-014 | 5 | 89 | 20 | 07/28/10 16:23:29 | 12.79 | 8.07 | 7.67 | 47817 | 31.11 |
| 19830-015 | 5 | 90 | 20 | 07/28/10 16:23:40 | 12.79 | 8.06 | 7.69 | 47846 | 31.13 |
| 19830-005 | 6 | 91 | 20 | 07/28/10 16:23:53 | 12.85 | 8.08 | 7.75 | 47847 | 31.13 |
| 19830-007 | 6 | 92 | 20 | 07/28/10 16:24:02 | 12.87 | 8.06 | 7.72 | 47840 | 31.13 |
| 19830-002 | 6 | 93 | 20 | 07/28/10 16:24:14 | 12.91 | 8.04 | 7.68 | 47846 | 31.13 |
| 19830-009 | 6 | 94 | 20 | 07/28/10 16:24:22 | 12.94 | 8.00 | 7.69 | 47835 | 31.13 |
| 19830-013 | 6 | 95 | 20 | 07/28/10 16:24:31 | 12.95 | 7.91 | 7.68 | 47822 | 31.12 |
| 19830-004 | 6 | 96 | 20 | 07/28/10 16:24:40 | 12.94 | 7.92 | 7.68 | 47822 | 31.12 |
| 19830-012 | 6 | 97 | 20 | 07/28/10 16:25:01 | 12.71 | 8.25 | 7.73 | 47884 | 31.15 |
| 19830-015 | 6 | 98 | 20 | 07/28/10 16:25:10 | 12.71 | 8.28 | 7.73 | 47824 | 31.11 |
| 19830-014 | 6 | 99 | 20 | 07/28/10 16:25:21 | 12.67 | 8.22 | 7.72 | 47814 | 31.10 |
| 19830-003 | 6 | 100 | 20 | 07/28/10 16:25:32 | 12.63 | 8.08 | 7.71 | 47828 | 31.11 |
| 19830-010 | 6 | 101 | 20 | 07/28/10 16:25:42 | 12.62 | 8.16 | 7.72 | 47866 | 31.14 |
| 19830-000 | 6 | 102 | 20 | 07/28/10 16:25:49 | 12.64 | 8.24 | 7.73 | 47920 | 31.18 |
| 19830-016 | 6 | 103 | 20 | 07/28/10 16:25:56 | 12.65 | 8.32 | 7.72 | 47836 | 31.12 |
| 19830-001 | 6 | 104 | 20 | 07/28/10 16:26:03 | 12.62 | 8.35 | 7.72 | 47787 | 31.08 |
| 19830-017 | 6 | 105 | 20 | 07/28/10 16:26:16 | 12.47 | 8.34 | 7.71 | 47791 | 31.08 |
| 19830-008 | 6 | 106 | 20 | 07/28/10 16:26:25 | 12.45 | 8.31 | 7.73 | 47875 | 31.14 |
| 19830-011 | 6 | 107 | 20 | 07/28/10 16:26:33 | 12.49 | 8.35 | 7.76 | 47916 | 31.17 |
| 19830-006 | 6 | 108 | 20 | 07/28/10 16:26:40 | 12.54 | 8.37 | 7.74 | 48001 | 31.23 |
| 19830-015 | 7 | 109 | 20 | 07/28/10 16:26:51 | 12.68 | 8.29 | 7.71 | 47934 | 31.19 |
| 19830-017 | 7 | 110 | 20 | 07/28/10 16:27:02 | 12.79 | 8.21 | 7.70 | 47913 | 31.18 |
| 19830-003 | 7 | 111 | 20 | 07/28/10 16:27:13 | 12.87 | 8.20 | 7.70 | 47946 | 31.20 |
| 19830-008 | 7 | 112 | 20 | 07/28/10 16:27:24 | 12.95 | 8.15 | 7.72 | 47891 | 31.17 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-006 | 7 | 113 | 20 | 07/28/10 16:27:38 | 13.01 | 8.25 | 7.70 | 47869 | 31.15 |
| 19830-012 | 7 | 114 | 20 | 07/28/10 16:27:47 | 13.05 | 8.23 | 7.70 | 47791 | 31.10 |
| 19830-004 | 7 | 115 | 20 | 07/28/10 16:27:55 | 13.05 | 8.19 | 7.70 | 47776 | 31.09 |
| 19830-011 | 7 | 116 | 20 | 07/28/10 16:28:05 | 13.04 | 8.21 | 7.71 | 47857 | 31.15 |
| 19830-014 | 7 | 117 | 20 | 07/28/10 16:28:14 | 13.05 | 8.14 | 7.71 | 47779 | 31.09 |
| 19830-005 | 7 | 118 | 20 | 07/28/10 16:28:22 | 13.03 | 8.15 | 7.71 | 47780 | 31.09 |
| 19830-001 | 7 | 119 | 20 | 07/28/10 16:28:31 | 12.97 | 8.18 | 7.70 | 47708 | 31.04 |
| 19830-000 | 7 | 120 | 20 | 07/28/10 16:28:40 | 12.94 | 8.15 | 7.71 | 47802 | 31.10 |
| 19830-009 | 7 | 121 | 20 | 07/28/10 16:28:50 | 12.82 | 8.26 | 7.72 | 47692 | 31.02 |
| 19830-010 | 7 | 122 | 20 | 07/28/10 16:28:57 | 12.77 | 8.24 | 7.71 | 47835 | 31.12 |
| 19830-007 | 7 | 123 | 20 | 07/28/10 16:29:04 | 12.76 | 8.16 | 7.69 | 47835 | 31.12 |
| 19830-002 | 7 | 124 | 20 | 07/28/10 16:29:13 | 12.75 | 8.05 | 7.66 | 47886 | 31.16 |
| 19830-013 | 7 | 125 | 20 | 07/28/10 16:29:21 | 12.78 | 7.95 | 7.66 | 47871 | 31.15 |
| 19830-016 | 7 | 126 | 20 | 07/28/10 16:29:31 | 12.88 | 7.91 | 7.66 | 47918 | 31.18 |
| 19830-017 | 8 | 127 | 20 | 07/28/10 16:29:41 | 12.99 | 7.93 | 7.65 | 47874 | 31.16 |
| 19830-013 | 8 | 128 | 20 | 07/28/10 16:29:48 | 13.03 | 7.91 | 7.67 | 47852 | 31.14 |
| 19830-010 | 8 | 129 | 20 | 07/28/10 16:30:02 | 13.05 | 8.04 | 7.73 | 47882 | 31.16 |
| 19830-007 | 8 | 130 | 20 | 07/28/10 16:30:12 | 13.11 | 8.16 | 7.72 | 47832 | 31.13 |
| 19830-011 | 8 | 131 | 20 | 07/28/10 16:30:22 | 13.08 | 8.15 | 7.68 | 47728 | 31.05 |
| 19830-002 | 8 | 132 | 20 | 07/28/10 16:30:34 | 13.00 | 7.78 | 7.68 | 47769 | 31.08 |
| 19830-004 | 8 | 133 | 20 | 07/28/10 16:30:45 | 13.04 | 7.55 | 7.67 | 47845 | 31.14 |
| 19830-003 | 8 | 134 | 20 | 07/28/10 16:30:53 | 13.06 | 7.65 | 7.67 | 47792 | 31.10 |
| 19830-005 | 8 | 135 | 20 | 07/28/10 16:31:04 | 13.01 | 7.81 | 7.64 | 47766 | 31.08 |
| 19830-012 | 8 | 136 | 20 | 07/28/10 16:31:15 | 12.89 | 7.65 | 7.65 | 47747 | 31.06 |
| 19830-006 | 8 | 137 | 20 | 07/28/10 16:31:26 | 12.77 | 7.82 | 7.67 | 47822 | 31.11 |
| 19830-001 | 8 | 138 | 20 | 07/28/10 16:31:35 | 12.73 | 7.85 | 7.68 | 47876 | 31.15 |
| 19830-014 | 8 | 139 | 20 | 07/28/10 16:31:48 | 12.78 | 7.81 | 7.69 | 47855 | 31.13 |
| 19830-000 | 8 | 140 | 20 | 07/28/10 16:31:58 | 12.84 | 7.64 | 7.70 | 47874 | 31.15 |
| 19830-009 | 8 | 141 | 20 | 07/28/10 16:32:10 | 12.85 | 7.85 | 7.70 | 47875 | 31.15 |
| 19830-008 | 8 | 142 | 20 | 07/28/10 16:32:23 | 12.89 | 8.00 | 7.74 | 47849 | 31.13 |
| 19830-015 | 8 | 143 | 20 | 07/28/10 16:32:36 | 12.96 | 8.09 | 7.74 | 47863 | 31.15 |
| 19830-016 | 8 | 144 | 20 | 07/28/10 16:32:47 | 13.03 | 8.00 | 7.69 | 47850 | 31.14 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 21 | 07/29/10 14:26:32 | 12.83 | 9.09 | 7.55 | 47611 | 30.96 |
| 19830-016 | 1 | 2 | 21 | 07/29/10 14:27:12 | 12.75 | 9.00 | 7.49 | 45239 | 29.25 |
| 19830-015 | 1 | 3 | 21 | 07/29/10 14:27:28 | 12.68 | 8.77 | 7.54 | 47619 | 30.96 |
| 19830-017 | 1 | 4 | 21 | 07/29/10 14:27:50 | 12.73 | 8.33 | 7.46 | 47525 | 30.89 |
| 19830-001 | 1 | 5 | 21 | 07/29/10 14:28:09 | 12.71 | 8.12 | 7.49 | 47597 | 30.95 |
| 19830-011 | 1 | 6 | 21 | 07/29/10 14:28:32 | 12.69 | 8.32 | 7.53 | 47586 | 30.94 |
| 19830-014 | 1 | 7 | 21 | 07/29/10 14:29:30 | 12.69 | 7.02 | 7.33 | 47591 | 30.94 |
| 19830-009 | 1 | 8 | 21 | 07/29/10 14:29:58 | 12.62 | 7.15 | 7.48 | 47584 | 30.93 |
| 19830-012 | 1 | 9 | 21 | 07/29/10 14:30:20 | 12.66 | 7.29 | 7.52 | 47619 | 30.96 |
| 19830-010 | 1 | 10 | 21 | 07/29/10 14:31:11 | 12.58 | 8.36 | 7.68 | 47619 | 30.96 |
| 19830-008 | 1 | 11 | 21 | 07/29/10 14:31:31 | 12.51 | 8.51 | 7.74 | 47604 | 30.94 |
| 19830-006 | 1 | 12 | 21 | 07/29/10 14:31:53 | 12.51 | 8.40 | 7.64 | 47646 | 30.97 |
| 19830-004 | 1 | 13 | 21 | 07/29/10 14:32:09 | 12.52 | 8.46 | 7.53 | 47608 | 30.95 |
| 19830-013 | 1 | 14 | 21 | 07/29/10 14:32:24 | 12.54 | 8.33 | 7.52 | 47607 | 30.95 |
| 19830-000 | 1 | 15 | 21 | 07/29/10 14:32:42 | 12.52 | 8.33 | 7.52 | 47632 | 30.96 |
| 19830-005 | 1 | 16 | 21 | 07/29/10 14:33:04 | 12.51 | 8.57 | 7.64 | 47753 | 31.05 |
| 19830-007 | 1 | 17 | 21 | 07/29/10 14:33:29 | 12.52 | 8.60 | 7.52 | 47790 | 31.08 |
| 19830-003 | 1 | 18 | 21 | 07/29/10 14:34:00 | 12.67 | 8.55 | 7.53 | 47696 | 31.02 |
| 19830-009 | 2 | 19 | 21 | 07/29/10 14:34:36 | 12.65 | 8.34 | 7.54 | 47630 | 30.97 |
| 19830-016 | 2 | 20 | 21 | 07/29/10 14:34:55 | 12.66 | 8.19 | 7.53 | 47596 | 30.94 |
| 19830-007 | 2 | 21 | 21 | 07/29/10 14:35:43 | 12.66 | 7.24 | 7.25 | 47587 | 30.94 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-015 | 2 | 22 | 21 | 07/29/10 14:36:22 | 12.66 | 7.81 | 7.52 | 47556 | 30.91 |
| 19830-008 | 2 | 23 | 21 | 07/29/10 14:37:07 | 12.67 | 8.36 | 7.73 | 47375 | 30.78 |
| 19830-002 | 2 | 24 | 21 | 07/29/10 14:37:46 | 12.64 | 7.80 | 7.44 | 47550 | 30.91 |
| 19830-012 | 2 | 25 | 21 | 07/29/10 14:38:07 | 12.61 | 7.78 | 7.48 | 47527 | 30.89 |
| 19830-004 | 2 | 26 | 21 | 07/29/10 14:38:29 | 12.63 | 7.85 | 7.42 | 47536 | 30.90 |
| 19830-000 | 2 | 27 | 21 | 07/29/10 14:39:11 | 12.51 | 8.61 | 7.54 | 47563 | 30.91 |
| 19830-003 | 2 | 28 | 21 | 07/29/10 14:39:48 | 12.47 | 8.44 | 7.47 | 47295 | 30.72 |
| 19830-011 | 2 | 29 | 21 | 07/29/10 14:40:11 | 12.49 | 8.28 | 7.52 | 47582 | 30.93 |
| 19830-017 | 2 | 30 | 21 | 07/29/10 14:40:37 | 12.51 | 8.16 | 7.42 | 47555 | 30.91 |
| 19830-014 | 2 | 31 | 21 | 07/29/10 14:41:25 | 12.45 | 7.34 | 7.38 | 47586 | 30.93 |
| 19830-001 | 2 | 32 | 21 | 07/29/10 14:42:10 | 12.41 | 6.74 | 7.35 | 47553 | 30.90 |
| 19830-013 | 2 | 33 | 21 | 07/29/10 14:42:57 | 12.45 | 7.60 | 7.37 | 47604 | 30.94 |
| 19830-010 | 2 | 34 | 21 | 07/29/10 14:44:00 | 12.54 | 8.08 | 7.54 | 47574 | 30.92 |
| 19830-006 | 2 | 35 | 21 | 07/29/10 14:44:59 | 12.65 | 7.12 | 7.28 | 47636 | 30.97 |
| 19830-005 | 2 | 36 | 21 | 07/29/10 14:46:44 | 12.61 | 7.02 | 7.39 | 47626 | 30.96 |
| 19830-013 | 3 | 37 | 21 | 07/29/10 14:47:15 | 12.57 | 7.31 | 7.29 | 47648 | 30.98 |
| 19830-009 | 3 | 38 | 21 | 07/29/10 14:47:28 | 12.63 | 6.91 | 7.36 | 47623 | 30.96 |
| 19830-017 | 3 | 39 | 21 | 07/29/10 14:47:37 | 12.68 | 7.28 | 7.35 | 47545 | 30.91 |
| 19830-016 | 3 | 40 | 21 | 07/29/10 14:47:51 | 12.63 | 7.12 | 7.34 | 47581 | 30.93 |
| 19830-000 | 3 | 41 | 21 | 07/29/10 14:48:03 | 12.62 | 7.49 | 7.45 | 47577 | 30.93 |
| 19830-010 | 3 | 42 | 21 | 07/29/10 14:48:15 | 12.63 | 8.14 | 7.47 | 47548 | 30.91 |
| 19830-008 | 3 | 43 | 21 | 07/29/10 14:48:26 | 12.56 | 8.21 | 7.50 | 47554 | 30.91 |
| 19830-014 | 3 | 44 | 21 | 07/29/10 14:48:34 | 12.55 | 8.18 | 7.53 | 47551 | 30.91 |
| 19830-004 | 3 | 45 | 21 | 07/29/10 14:48:42 | 12.55 | 8.10 | 7.51 | 47508 | 30.87 |
| 19830-006 | 3 | 46 | 21 | 07/29/10 14:48:50 | 12.55 | 7.92 | 7.39 | 47593 | 30.94 |
| 19830-005 | 3 | 47 | 21 | 07/29/10 14:49:03 | 12.54 | 7.06 | 7.43 | 47592 | 30.94 |
| 19830-011 | 3 | 48 | 21 | 07/29/10 14:49:12 | 12.40 | 7.33 | 7.49 | 47601 | 30.94 |
| 19830-002 | 3 | 49 | 21 | 07/29/10 14:49:21 | 12.37 | 7.76 | 7.46 | 47628 | 30.95 |
| 19830-012 | 3 | 50 | 21 | 07/29/10 14:49:31 | 12.45 | 7.55 | 7.33 | 47633 | 30.96 |
| 19830-001 | 3 | 51 | 21 | 07/29/10 14:49:57 | 12.33 | 6.74 | 7.57 | 47731 | 31.03 |
| 19830-003 | 3 | 52 | 21 | 07/29/10 14:50:14 | 12.32 | 8.15 | 7.67 | 47687 | 30.99 |
| 19830-007 | 3 | 53 | 21 | 07/29/10 14:50:24 | 12.33 | 8.58 | 7.59 | 47688 | 31.00 |
| 19830-015 | 3 | 54 | 21 | 07/29/10 14:50:32 | 12.33 | 8.54 | 7.57 | 47680 | 30.99 |
| 19830-006 | 4 | 55 | 21 | 07/29/10 14:50:42 | 12.28 | 8.51 | 7.68 | 47695 | 31.00 |
| 19830-011 | 4 | 56 | 21 | 07/29/10 14:50:57 | 12.21 | 8.66 | 7.70 | 47670 | 30.98 |
| 19830-012 | 4 | 57 | 21 | 07/29/10 14:51:09 | 12.16 | 8.63 | 7.73 | 47668 | 30.97 |
| 19830-010 | 4 | 58 | 21 | 07/29/10 14:51:18 | 12.13 | 8.76 | 7.74 | 47714 | 31.01 |
| 19830-015 | 4 | 59 | 21 | 07/29/10 14:51:33 | 12.03 | 8.82 | 7.67 | 47744 | 31.02 |
| 19830-009 | 4 | 60 | 21 | 07/29/10 14:51:41 | 11.98 | 8.72 | 7.68 | 47728 | 31.01 |
| 19830-001 | 4 | 61 | 21 | 07/29/10 14:51:52 | 11.98 | 8.66 | 7.70 | 47854 | 31.10 |
| 19830-016 | 4 | 62 | 21 | 07/29/10 14:52:06 | 12.11 | 8.41 | 7.53 | 47750 | 31.03 |
| 19830-008 | 4 | 63 | 21 | 07/29/10 14:52:28 | 12.27 | 8.36 | 7.66 | 47690 | 30.99 |
| 19830-004 | 4 | 64 | 21 | 07/29/10 14:52:53 | 12.42 | 8.17 | 7.55 | 47680 | 30.99 |
| 19830-007 | 4 | 65 | 21 | 07/29/10 14:53:22 | 12.25 | 8.08 | 7.41 | 47749 | 31.04 |
| 19830-014 | 4 | 66 | 21 | 07/29/10 14:53:36 | 12.21 | 7.97 | 7.38 | 47680 | 30.99 |
| 19830-000 | 4 | 67 | 21 | 07/29/10 14:53:48 | 12.19 | 7.66 | 7.36 | 47642 | 30.96 |
| 19830-017 | 4 | 68 | 21 | 07/29/10 14:54:01 | 12.18 | 7.81 | 7.34 | 47636 | 30.95 |
| 19830-013 | 4 | 69 | 21 | 07/29/10 14:54:08 | 12.17 | 7.82 | 7.36 | 47648 | 30.96 |
| 19830-002 | 4 | 70 | 21 | 07/29/10 14:54:24 | 12.18 | 8.05 | 7.50 | 47660 | 30.97 |
| 19830-005 | 4 | 71 | 21 | 07/29/10 14:54:36 | 12.20 | 8.17 | 7.59 | 47650 | 30.96 |
| 19830-003 | 4 | 72 | 21 | 07/29/10 14:54:49 | 12.20 | 8.26 | 7.56 | 47641 | 30.96 |
| 19830-016 | 5 | 73 | 21 | 07/29/10 14:55:01 | 12.18 | 8.34 | 7.50 | 47638 | 30.95 |
| 19830-003 | 5 | 74 | 21 | 07/29/10 14:55:27 | 12.17 | 8.00 | 7.44 | 47621 | 30.94 |
| 19830-000 | 5 | 75 | 21 | 07/29/10 14:55:47 | 12.22 | 8.09 | 7.48 | 47623 | 30.94 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-013 | 5 | 76 | 21 | 07/29/10 14:56:03 | 12.26 | 8.34 | 7.44 | 47592 | 30.92 |
| 19830-001 | 5 | 77 | 21 | 07/29/10 14:56:18 | 12.30 | 8.29 | 7.51 | 46090 | 29.84 |
| 19830-002 | 5 | 78 | 21 | 07/29/10 14:56:32 | 12.36 | 8.29 | 7.48 | 47633 | 30.96 |
| 19830-004 | 5 | 79 | 21 | 07/29/10 14:56:40 | 12.41 | 8.14 | 7.44 | 47614 | 30.95 |
| 19830-012 | 5 | 80 | 21 | 07/29/10 14:56:52 | 12.48 | 8.03 | 7.50 | 47655 | 30.98 |
| 19830-005 | 5 | 81 | 21 | 07/29/10 14:57:08 | 12.33 | 8.34 | 7.60 | 47647 | 30.97 |
| 19830-011 | 5 | 82 | 21 | 07/29/10 14:57:19 | 12.24 | 8.24 | 7.60 | 47615 | 30.94 |
| 19830-010 | 5 | 83 | 21 | 07/29/10 14:57:29 | 12.19 | 8.19 | 7.58 | 47666 | 30.97 |
| 19830-017 | 5 | 84 | 21 | 07/29/10 14:57:40 | 12.19 | 8.26 | 7.49 | 47551 | 30.89 |
| 19830-009 | 5 | 85 | 21 | 07/29/10 14:57:51 | 12.18 | 7.93 | 7.45 | 47677 | 30.98 |
| 19830-006 | 5 | 86 | 21 | 07/29/10 14:58:04 | 12.23 | 7.82 | 7.49 | 47647 | 30.96 |
| 19830-008 | 5 | 87 | 21 | 07/29/10 14:58:15 | 12.23 | 8.06 | 7.59 | 47682 | 30.99 |
| 19830-007 | 5 | 88 | 21 | 07/29/10 14:58:29 | 12.24 | 8.39 | 7.55 | 47747 | 31.03 |
| 19830-014 | 5 | 89 | 21 | 07/29/10 14:58:59 | 12.17 | 8.40 | 7.56 | 47703 | 31.00 |
| 19830-015 | 5 | 90 | 21 | 07/29/10 14:59:10 | 12.16 | 8.35 | 7.56 | 47703 | 31.00 |
| 19830-005 | 6 | 91 | 21 | 07/29/10 14:59:20 | 12.17 | 8.37 | 7.63 | 47715 | 31.01 |
| 19830-007 | 6 | 92 | 21 | 07/29/10 14:59:31 | 12.19 | 8.40 | 7.60 | 47735 | 31.02 |
| 19830-002 | 6 | 93 | 21 | 07/29/10 15:00:01 | 12.27 | 8.26 | 7.49 | 47682 | 30.99 |
| 19830-009 | 6 | 94 | 21 | 07/29/10 15:00:10 | 12.29 | 8.17 | 7.51 | 47681 | 30.99 |
| 19830-013 | 6 | 95 | 21 | 07/29/10 15:00:18 | 12.28 | 8.09 | 7.53 | 47743 | 31.03 |
| 19830-004 | 6 | 96 | 21 | 07/29/10 15:00:27 | 12.34 | 8.09 | 7.51 | 47773 | 31.06 |
| 19830-012 | 6 | 97 | 21 | 07/29/10 15:00:40 | 12.28 | 8.26 | 7.54 | 47701 | 31.00 |
| 19830-015 | 6 | 98 | 21 | 07/29/10 15:00:51 | 12.21 | 8.55 | 7.61 | 47680 | 30.98 |
| 19830-014 | 6 | 99 | 21 | 07/29/10 15:01:01 | 12.14 | 8.43 | 7.58 | 47718 | 31.01 |
| 19830-003 | 6 | 100 | 21 | 07/29/10 15:01:09 | 12.12 | 8.35 | 7.58 | 47790 | 31.06 |
| 19830-010 | 6 | 101 | 21 | 07/29/10 15:01:26 | 12.13 | 8.60 | 7.63 | 47826 | 31.09 |
| 19830-000 | 6 | 102 | 21 | 07/29/10 15:01:39 | 12.11 | 8.80 | 7.64 | 47794 | 31.06 |
| 19830-016 | 6 | 103 | 21 | 07/29/10 15:01:49 | 12.08 | 8.89 | 7.62 | 47810 | 31.07 |
| 19830-001 | 6 | 104 | 21 | 07/29/10 15:02:00 | 12.09 | 8.77 | 7.65 | 47880 | 31.12 |
| 19830-017 | 6 | 105 | 21 | 07/29/10 15:02:11 | 12.07 | 8.72 | 7.63 | 47736 | 31.02 |
| 19830-008 | 6 | 106 | 21 | 07/29/10 15:02:19 | 12.07 | 8.73 | 7.67 | 47762 | 31.04 |
| 19830-011 | 6 | 107 | 21 | 07/29/10 15:02:30 | 12.07 | 8.85 | 7.71 | 47762 | 31.04 |
| 19830-006 | 6 | 108 | 21 | 07/29/10 15:02:38 | 12.12 | 8.78 | 7.66 | 47864 | 31.11 |
| 19830-015 | 7 | 109 | 21 | 07/29/10 15:02:47 | 12.21 | 8.69 | 7.62 | 47809 | 31.08 |
| 19830-017 | 7 | 110 | 21 | 07/29/10 15:02:57 | 12.30 | 8.61 | 7.61 | 47839 | 31.10 |
| 19830-003 | 7 | 111 | 21 | 07/29/10 15:03:05 | 12.35 | 8.57 | 7.60 | 47870 | 31.13 |
| 19830-008 | 7 | 112 | 21 | 07/29/10 15:03:14 | 12.38 | 8.56 | 7.63 | 47927 | 31.17 |
| 19830-006 | 7 | 113 | 21 | 07/29/10 15:03:30 | 12.47 | 8.69 | 7.58 | 47656 | 30.98 |
| 19830-012 | 7 | 114 | 21 | 07/29/10 15:03:38 | 12.50 | 8.66 | 7.57 | 47483 | 30.85 |
| 19830-004 | 7 | 115 | 21 | 07/29/10 15:03:46 | 12.45 | 8.64 | 7.58 | 47405 | 30.80 |
| 19830-011 | 7 | 116 | 21 | 07/29/10 15:03:53 | 12.40 | 8.65 | 7.57 | 47483 | 30.85 |
| 19830-014 | 7 | 117 | 21 | 07/29/10 15:04:02 | 12.35 | 8.60 | 7.59 | 47584 | 30.92 |
| 19830-005 | 7 | 118 | 21 | 07/29/10 15:04:09 | 12.33 | 8.56 | 7.59 | 47565 | 30.91 |
| 19830-001 | 7 | 119 | 21 | 07/29/10 15:04:16 | 12.32 | 8.56 | 7.58 | 47499 | 30.86 |
| 19830-000 | 7 | 120 | 21 | 07/29/10 15:04:23 | 12.31 | 8.54 | 7.60 | 47548 | 30.89 |
| 19830-009 | 7 | 121 | 21 | 07/29/10 15:04:30 | 12.25 | 8.59 | 7.61 | 47502 | 30.86 |
| 19830-010 | 7 | 122 | 21 | 07/29/10 15:04:41 | 12.11 | 8.60 | 7.56 | 47622 | 30.94 |
| 19830-007 | 7 | 123 | 21 | 07/29/10 15:04:50 | 12.10 | 8.38 | 7.50 | 47725 | 31.01 |
| 19830-002 | 7 | 124 | 21 | 07/29/10 15:05:00 | 12.10 | 8.25 | 7.47 | 47791 | 31.06 |
| 19830-013 | 7 | 125 | 21 | 07/29/10 15:05:10 | 12.15 | 8.19 | 7.47 | 47775 | 31.05 |
| 19830-016 | 7 | 126 | 21 | 07/29/10 15:05:19 | 12.24 | 8.25 | 7.48 | 47770 | 31.05 |
| 19830-017 | 8 | 127 | 21 | 07/29/10 15:05:28 | 12.36 | 8.28 | 7.44 | 47740 | 31.03 |
| 19830-013 | 8 | 128 | 21 | 07/29/10 15:05:36 | 12.43 | 8.20 | 7.46 | 47735 | 31.03 |
| 19830-010 | 8 | 129 | 21 | 07/29/10 15:05:51 | 12.60 | 8.28 | 7.62 | 47641 | 30.97 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-007 | 8 | 130 | 21 | 07/29/10 15:06:01 | 12.61 | 8.46 | 7.58 | 47542 | 30.90 |
| 19830-011 | 8 | 131 | 21 | 07/29/10 15:06:10 | 12.55 | 8.44 | 7.51 | 47473 | 30.85 |
| 19830-002 | 8 | 132 | 21 | 07/29/10 15:06:20 | 12.43 | 7.94 | 7.48 | 47567 | 30.91 |
| 19830-004 | 8 | 133 | 21 | 07/29/10 15:06:30 | 12.42 | 7.42 | 7.46 | 47569 | 30.91 |
| 19830-003 | 8 | 134 | 21 | 07/29/10 15:06:38 | 12.43 | 7.47 | 7.47 | 47549 | 30.90 |
| 19830-005 | 8 | 135 | 21 | 07/29/10 15:06:46 | 12.36 | 7.80 | 7.45 | 47589 | 30.93 |
| 19830-012 | 8 | 136 | 21 | 07/29/10 15:06:58 | 12.27 | 7.87 | 7.50 | 47633 | 30.95 |
| 19830-006 | 8 | 137 | 21 | 07/29/10 15:07:09 | 12.22 | 7.98 | 7.50 | 47712 | 31.01 |
| 19830-001 | 8 | 138 | 21 | 07/29/10 15:07:19 | 12.19 | 8.04 | 7.51 | 47701 | 31.00 |
| 19830-014 | 8 | 139 | 21 | 07/29/10 15:07:28 | 12.20 | 8.04 | 7.52 | 47681 | 30.99 |
| 19830-000 | 8 | 140 | 21 | 07/29/10 15:07:36 | 12.22 | 7.90 | 7.51 | 47720 | 31.01 |
| 19830-009 | 8 | 141 | 21 | 07/29/10 15:07:45 | 12.26 | 7.98 | 7.54 | 47742 | 31.03 |
| 19830-008 | 8 | 142 | 21 | 07/29/10 15:07:55 | 12.31 | 8.23 | 7.60 | 47740 | 31.03 |
| 19830-015 | 8 | 143 | 21 | 07/29/10 15:08:04 | 12.37 | 8.40 | 7.64 | 47841 | 31.11 |
| 19830-016 | 8 | 144 | 21 | 07/29/10 15:08:17 | 12.50 | 8.34 | 7.52 | 47668 | 30.99 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 22 | 07/30/10 11:23:15 | 12.97 | 8.13 | 7.60 | 48221 | 31.41 |
| 19830-016 | 1 | 2 | 22 | 07/30/10 11:23:53 | 12.87 | 7.83 | 7.55 | 48023 | 31.26 |
| 19830-015 | 1 | 3 | 22 | 07/30/10 11:24:01 | 12.84 | 7.77 | 7.54 | 48220 | 31.40 |
| 19830-017 | 1 | 4 | 22 | 07/30/10 11:24:15 | 12.85 | 7.46 | 7.47 | 48209 | 31.39 |
| 19830-001 | 1 | 5 | 22 | 07/30/10 11:24:29 | 12.86 | 6.87 | 7.50 | 48218 | 31.40 |
| 19830-011 | 1 | 6 | 22 | 07/30/10 11:24:40 | 12.84 | 6.78 | 7.55 | 48235 | 31.41 |
| 19830-014 | 1 | 7 | 22 | 07/30/10 11:24:51 | 12.80 | 6.96 | 7.50 | 48211 | 31.39 |
| 19830-009 | 1 | 8 | 22 | 07/30/10 11:25:08 | 12.72 | 6.12 | 7.50 | 48259 | 31.42 |
| 19830-012 | 1 | 9 | 22 | 07/30/10 11:25:19 | 12.75 | 5.90 | 7.53 | 48257 | 31.42 |
| 19830-010 | 1 | 10 | 22 | 07/30/10 11:25:34 | 12.69 | 6.11 | 7.57 | 48213 | 31.39 |
| 19830-008 | 1 | 11 | 22 | 07/30/10 11:25:49 | 12.62 | 6.75 | 7.68 | 48255 | 31.42 |
| 19830-006 | 1 | 12 | 22 | 07/30/10 11:25:59 | 12.59 | 6.93 | 7.70 | 48274 | 31.43 |
| 19830-004 | 1 | 13 | 22 | 07/30/10 11:26:13 | 12.61 | 7.57 | 7.61 | 48218 | 31.39 |
| 19830-013 | 1 | 14 | 22 | 07/30/10 11:26:25 | 12.60 | 7.58 | 7.51 | 48232 | 31.40 |
| 19830-000 | 1 | 15 | 22 | 07/30/10 11:26:36 | 12.57 | 7.41 | 7.48 | 48281 | 31.43 |
| 19830-005 | 1 | 16 | 22 | 07/30/10 11:26:50 | 12.52 | 7.56 | 7.64 | 48346 | 31.48 |
| 19830-007 | 1 | 17 | 22 | 07/30/10 11:27:04 | 12.48 | 8.10 | 7.66 | 48410 | 31.52 |
| 19830-003 | 1 | 18 | 22 | 07/30/10 11:27:14 | 12.52 | 8.29 | 7.61 | 48428 | 31.54 |
| 19830-009 | 2 | 19 | 22 | 07/30/10 11:27:32 | 12.74 | 8.14 | 7.66 | 48333 | 31.48 |
| 19830-016 | 2 | 20 | 22 | 07/30/10 11:27:47 | 12.77 | 7.95 | 7.63 | 48255 | 31.42 |
| 19830-007 | 2 | 21 | 22 | 07/30/10 11:27:58 | 12.77 | 7.76 | 7.50 | 48267 | 31.43 |
| 19830-015 | 2 | 22 | 22 | 07/30/10 11:28:08 | 12.78 | 7.48 | 7.46 | 48209 | 31.39 |
| 19830-008 | 2 | 23 | 22 | 07/30/10 11:28:16 | 12.78 | 7.42 | 7.58 | 48186 | 31.37 |
| 19830-002 | 2 | 24 | 22 | 07/30/10 11:28:26 | 12.74 | 7.61 | 7.65 | 48218 | 31.40 |
| 19830-012 | 2 | 25 | 22 | 07/30/10 11:28:38 | 12.69 | 7.53 | 7.54 | 48186 | 31.37 |
| 19830-004 | 2 | 26 | 22 | 07/30/10 11:28:48 | 12.69 | 7.26 | 7.47 | 48199 | 31.38 |
| 19830-000 | 2 | 27 | 22 | 07/30/10 11:29:01 | 12.61 | 7.27 | 7.48 | 48210 | 31.38 |
| 19830-003 | 2 | 28 | 22 | 07/30/10 11:29:11 | 12.57 | 7.64 | 7.47 | 48104 | 31.31 |
| 19830-011 | 2 | 29 | 22 | 07/30/10 11:29:19 | 12.55 | 7.76 | 7.49 | 48199 | 31.37 |
| 19830-017 | 2 | 30 | 22 | 07/30/10 11:29:27 | 12.55 | 7.79 | 7.51 | 48194 | 31.37 |
| 19830-014 | 2 | 31 | 22 | 07/30/10 11:29:37 | 12.50 | 7.78 | 7.43 | 48165 | 31.35 |
| 19830-001 | 2 | 32 | 22 | 07/30/10 11:29:51 | 12.48 | 6.54 | 7.36 | 48195 | 31.37 |
| 19830-013 | 2 | 33 | 22 | 07/30/10 11:30:14 | 12.51 | 6.36 | 7.43 | 48253 | 31.41 |
| 19830-010 | 2 | 34 | 22 | 07/30/10 11:30:22 | 12.54 | 6.76 | 7.46 | 48277 | 31.43 |
| 19830-006 | 2 | 35 | 22 | 07/30/10 11:30:37 | 12.70 | 7.25 | 7.38 | 48329 | 31.47 |
| 19830-005 | 2 | 36 | 22 | 07/30/10 11:30:58 | 12.75 | 6.70 | 7.38 | 48252 | 31.42 |
| 19830-013 | 3 | 37 | 22 | 07/30/10 11:31:43 | 12.73 | 4.91 | 7.16 | 47897 | 31.16 |
| 19830-009 | 3 | 38 | 22 | 07/30/10 11:32:16 | 12.82 | 6.61 | 7.37 | 48022 | 31.26 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-017 | 3 | 39 | 22 | 07/30/10 11:32:26 | 12.83 | 7.00 | 7.37 | 48179 | 31.37 |
| 19830-016 | 3 | 40 | 22 | 07/30/10 11:32:38 | 12.75 | 6.54 | 7.35 | 48216 | 31.39 |
| 19830-000 | 3 | 41 | 22 | 07/30/10 11:32:51 | 12.74 | 6.87 | 7.44 | 48223 | 31.40 |
| 19830-010 | 3 | 42 | 22 | 07/30/10 11:33:04 | 12.74 | 7.56 | 7.49 | 48216 | 31.39 |
| 19830-008 | 3 | 43 | 22 | 07/30/10 11:33:15 | 12.68 | 7.71 | 7.51 | 48175 | 31.36 |
| 19830-014 | 3 | 44 | 22 | 07/30/10 11:33:23 | 12.64 | 7.68 | 7.53 | 48237 | 31.41 |
| 19830-004 | 3 | 45 | 22 | 07/30/10 11:33:38 | 12.64 | 7.33 | 7.46 | 48187 | 31.37 |
| 19830-006 | 3 | 46 | 22 | 07/30/10 11:33:54 | 12.64 | 6.38 | 7.26 | 48225 | 31.40 |
| 19830-005 | 3 | 47 | 22 | 07/30/10 11:34:41 | 12.61 | 7.04 | 7.55 | 48262 | 31.42 |
| 19830-011 | 3 | 48 | 22 | 07/30/10 11:34:51 | 12.45 | 7.55 | 7.59 | 48293 | 31.44 |
| 19830-002 | 3 | 49 | 22 | 07/30/10 11:34:59 | 12.42 | 7.76 | 7.59 | 48316 | 31.45 |
| 19830-012 | 3 | 50 | 22 | 07/30/10 11:35:13 | 12.55 | 6.75 | 7.36 | 48278 | 31.43 |
| 19830-001 | 3 | 51 | 22 | 07/30/10 11:36:06 | 12.36 | 8.78 | 7.47 | 48375 | 31.49 |
| 19830-003 | 3 | 52 | 22 | 07/30/10 11:36:21 | 12.39 | 8.25 | 7.65 | 48321 | 31.46 |
| 19830-007 | 3 | 53 | 22 | 07/30/10 11:36:35 | 12.41 | 8.18 | 7.56 | 48297 | 31.44 |
| 19830-015 | 3 | 54 | 22 | 07/30/10 11:36:45 | 12.40 | 7.89 | 7.61 | 48348 | 31.48 |
| 19830-006 | 4 | 55 | 22 | 07/30/10 11:36:56 | 12.37 | 7.96 | 7.75 | 48322 | 31.46 |
| 19830-011 | 4 | 56 | 22 | 07/30/10 11:37:07 | 12.31 | 8.29 | 7.80 | 48289 | 31.43 |
| 19830-012 | 4 | 57 | 22 | 07/30/10 11:37:16 | 12.25 | 8.27 | 7.81 | 48322 | 31.45 |
| 19830-010 | 4 | 58 | 22 | 07/30/10 11:37:24 | 12.23 | 8.27 | 7.80 | 48319 | 31.45 |
| 19830-015 | 4 | 59 | 22 | 07/30/10 11:37:34 | 12.14 | 8.35 | 7.74 | 48338 | 31.46 |
| 19830-009 | 4 | 60 | 22 | 07/30/10 11:37:44 | 12.08 | 8.23 | 7.74 | 48373 | 31.48 |
| 19830-001 | 4 | 61 | 22 | 07/30/10 11:37:53 | 12.07 | 8.20 | 7.78 | 48502 | 31.57 |
| 19830-016 | 4 | 62 | 22 | 07/30/10 11:38:08 | 12.26 | 8.05 | 7.64 | 47996 | 31.22 |
| 19830-008 | 4 | 63 | 22 | 07/30/10 11:38:17 | 12.35 | 7.97 | 7.61 | 48443 | 31.54 |
| 19830-004 | 4 | 64 | 22 | 07/30/10 11:38:31 | 12.56 | 7.83 | 7.62 | 48357 | 31.49 |
| 19830-007 | 4 | 65 | 22 | 07/30/10 11:38:47 | 12.40 | 7.66 | 7.54 | 48334 | 31.47 |
| 19830-014 | 4 | 66 | 22 | 07/30/10 11:38:58 | 12.36 | 7.78 | 7.49 | 48277 | 31.42 |
| 19830-000 | 4 | 67 | 22 | 07/30/10 11:39:10 | 12.31 | 7.45 | 7.45 | 48263 | 31.41 |
| 19830-017 | 4 | 68 | 22 | 07/30/10 11:39:19 | 12.30 | 7.31 | 7.40 | 48276 | 31.42 |
| 19830-013 | 4 | 69 | 22 | 07/30/10 11:39:28 | 12.27 | 7.27 | 7.43 | 48336 | 31.46 |
| 19830-002 | 4 | 70 | 22 | 07/30/10 11:39:38 | 12.29 | 7.44 | 7.54 | 48313 | 31.45 |
| 19830-005 | 4 | 71 | 22 | 07/30/10 11:39:46 | 12.30 | 7.63 | 7.59 | 48317 | 31.45 |
| 19830-003 | 4 | 72 | 22 | 07/30/10 11:39:55 | 12.32 | 7.79 | 7.59 | 48287 | 31.43 |
| 19830-016 | 5 | 73 | 22 | 07/30/10 11:40:05 | 12.30 | 7.92 | 7.55 | 48296 | 31.43 |
| 19830-003 | 5 | 74 | 22 | 07/30/10 11:40:17 | 12.30 | 7.79 | 7.48 | 48262 | 31.41 |
| 19830-000 | 5 | 75 | 22 | 07/30/10 11:40:26 | 12.34 | 7.50 | 7.45 | 48293 | 31.43 |
| 19830-013 | 5 | 76 | 22 | 07/30/10 11:40:37 | 12.40 | 7.48 | 7.47 | 48270 | 31.42 |
| 19830-001 | 5 | 77 | 22 | 07/30/10 11:40:46 | 12.45 | 7.59 | 7.52 | 47393 | 30.79 |
| 19830-002 | 5 | 78 | 22 | 07/30/10 11:40:56 | 12.50 | 7.76 | 7.54 | 48321 | 31.46 |
| 19830-004 | 5 | 79 | 22 | 07/30/10 11:41:08 | 12.60 | 7.63 | 7.46 | 48240 | 31.41 |
| 19830-012 | 5 | 80 | 22 | 07/30/10 11:41:19 | 12.66 | 7.31 | 7.51 | 48285 | 31.44 |
| 19830-005 | 5 | 81 | 22 | 07/30/10 11:41:34 | 12.48 | 7.86 | 7.62 | 48194 | 31.37 |
| 19830-011 | 5 | 82 | 22 | 07/30/10 11:41:43 | 12.38 | 7.87 | 7.62 | 48231 | 31.39 |
| 19830-010 | 5 | 83 | 22 | 07/30/10 11:41:52 | 12.30 | 7.80 | 7.63 | 48329 | 31.46 |
| 19830-017 | 5 | 84 | 22 | 07/30/10 11:41:59 | 12.30 | 7.83 | 7.61 | 48231 | 31.39 |
| 19830-009 | 5 | 85 | 22 | 07/30/10 11:42:07 | 12.30 | 7.66 | 7.54 | 48322 | 31.45 |
| 19830-006 | 5 | 86 | 22 | 07/30/10 11:42:16 | 12.31 | 7.26 | 7.55 | 48277 | 31.42 |
| 19830-008 | 5 | 87 | 22 | 07/30/10 11:42:24 | 12.35 | 7.31 | 7.56 | 48338 | 31.47 |
| 19830-007 | 5 | 88 | 22 | 07/30/10 11:42:35 | 12.37 | 7.66 | 7.57 | 48349 | 31.48 |
| 19830-014 | 5 | 89 | 22 | 07/30/10 11:42:45 | 12.33 | 7.84 | 7.57 | 48364 | 31.48 |
| 19830-015 | 5 | 90 | 22 | 07/30/10 11:42:54 | 12.34 | 7.98 | 7.59 | 48346 | 31.47 |
| 19830-005 | 6 | 91 | 22 | 07/30/10 11:43:01 | 12.35 | 8.01 | 7.62 | 48352 | 31.48 |
| 19830-007 | 6 | 92 | 22 | 07/30/10 11:43:12 | 12.37 | 8.05 | 7.62 | 48362 | 31.48 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-002 | 6 | 93 | 22 | 07/30/10 11:43:20 | 12.40 | 8.12 | 7.58 | 48316 | 31.45 |
| 19830-009 | 6 | 94 | 22 | 07/30/10 11:43:30 | 12.45 | 8.02 | 7.58 | 48340 | 31.47 |
| 19830-013 | 6 | 95 | 22 | 07/30/10 11:43:40 | 12.49 | 7.60 | 7.59 | 48327 | 31.46 |
| 19830-004 | 6 | 96 | 22 | 07/30/10 11:43:47 | 12.54 | 7.60 | 7.57 | 48434 | 31.54 |
| 19830-012 | 6 | 97 | 22 | 07/30/10 11:44:22 | 12.29 | 8.01 | 7.64 | 48476 | 31.56 |
| 19830-015 | 6 | 98 | 22 | 07/30/10 11:44:31 | 12.33 | 8.09 | 7.66 | 48355 | 31.48 |
| 19830-014 | 6 | 99 | 22 | 07/30/10 11:44:44 | 12.28 | 7.95 | 7.60 | 48308 | 31.44 |
| 19830-003 | 6 | 100 | 22 | 07/30/10 11:44:55 | 12.27 | 7.78 | 7.59 | 48406 | 31.51 |
| 19830-010 | 6 | 101 | 22 | 07/30/10 11:45:03 | 12.27 | 7.89 | 7.61 | 48402 | 31.51 |
| 19830-000 | 6 | 102 | 22 | 07/30/10 11:45:12 | 12.26 | 8.14 | 7.65 | 48423 | 31.52 |
| 19830-016 | 6 | 103 | 22 | 07/30/10 11:45:21 | 12.26 | 8.28 | 7.64 | 48387 | 31.50 |
| 19830-001 | 6 | 104 | 22 | 07/30/10 11:45:28 | 12.26 | 8.25 | 7.69 | 48438 | 31.53 |
| 19830-017 | 6 | 105 | 22 | 07/30/10 11:45:44 | 12.18 | 8.32 | 7.65 | 48262 | 31.40 |
| 19830-008 | 6 | 106 | 22 | 07/30/10 11:45:56 | 12.17 | 8.30 | 7.72 | 48413 | 31.51 |
| 19830-011 | 6 | 107 | 22 | 07/30/10 11:46:09 | 12.25 | 8.40 | 7.73 | 48359 | 31.48 |
| 19830-006 | 6 | 108 | 22 | 07/30/10 11:46:17 | 12.32 | 8.31 | 7.70 | 48449 | 31.55 |
| 19830-015 | 7 | 109 | 22 | 07/30/10 11:46:26 | 12.45 | 8.26 | 7.67 | 48504 | 31.59 |
| 19830-017 | 7 | 110 | 22 | 07/30/10 11:46:35 | 12.57 | 8.21 | 7.64 | 48461 | 31.56 |
| 19830-003 | 7 | 111 | 22 | 07/30/10 11:46:46 | 12.71 | 8.16 | 7.60 | 48454 | 31.56 |
| 19830-008 | 7 | 112 | 22 | 07/30/10 11:46:58 | 12.79 | 8.00 | 7.66 | 48504 | 31.60 |
| 19830-006 | 7 | 113 | 22 | 07/30/10 11:47:08 | 12.74 | 8.16 | 7.69 | 48125 | 31.33 |
| 19830-012 | 7 | 114 | 22 | 07/30/10 11:47:16 | 12.66 | 8.34 | 7.65 | 48090 | 31.30 |
| 19830-004 | 7 | 115 | 22 | 07/30/10 11:47:25 | 12.56 | 8.31 | 7.65 | 48095 | 31.30 |
| 19830-011 | 7 | 116 | 22 | 07/30/10 11:47:35 | 12.49 | 8.21 | 7.63 | 48115 | 31.31 |
| 19830-014 | 7 | 117 | 22 | 07/30/10 11:47:44 | 12.44 | 8.04 | 7.66 | 48212 | 31.38 |
| 19830-005 | 7 | 118 | 22 | 07/30/10 11:47:50 | 12.43 | 8.03 | 7.68 | 48214 | 31.38 |
| 19830-001 | 7 | 119 | 22 | 07/30/10 11:47:58 | 12.42 | 8.12 | 7.66 | 48156 | 31.34 |
| 19830-000 | 7 | 120 | 22 | 07/30/10 11:48:04 | 12.42 | 8.15 | 7.65 | 48218 | 31.38 |
| 19830-009 | 7 | 121 | 22 | 07/30/10 11:48:13 | 12.33 | 8.21 | 7.62 | 48222 | 31.38 |
| 19830-010 | 7 | 122 | 22 | 07/30/10 11:48:21 | 12.26 | 8.17 | 7.60 | 48279 | 31.42 |
| 19830-007 | 7 | 123 | 22 | 07/30/10 11:48:29 | 12.26 | 7.94 | 7.54 | 48358 | 31.48 |
| 19830-002 | 7 | 124 | 22 | 07/30/10 11:48:39 | 12.29 | 7.81 | 7.52 | 48438 | 31.54 |
| 19830-013 | 7 | 125 | 22 | 07/30/10 11:48:46 | 12.34 | 7.76 | 7.53 | 48411 | 31.52 |
| 19830-016 | 7 | 126 | 22 | 07/30/10 11:48:54 | 12.44 | 7.77 | 7.52 | 48454 | 31.55 |
| 19830-017 | 8 | 127 | 22 | 07/30/10 11:49:01 | 12.56 | 7.80 | 7.49 | 48421 | 31.53 |
| 19830-013 | 8 | 128 | 22 | 07/30/10 11:49:08 | 12.66 | 7.77 | 7.49 | 48470 | 31.57 |
| 19830-010 | 8 | 129 | 22 | 07/30/10 11:49:17 | 12.69 | 7.80 | 7.57 | 48320 | 31.47 |
| 19830-007 | 8 | 130 | 22 | 07/30/10 11:49:24 | 12.71 | 7.86 | 7.62 | 48196 | 31.38 |
| 19830-011 | 8 | 131 | 22 | 07/30/10 11:49:34 | 12.61 | 7.93 | 7.55 | 48141 | 31.33 |
| 19830-002 | 8 | 132 | 22 | 07/30/10 11:49:45 | 12.52 | 7.18 | 7.50 | 48240 | 31.40 |
| 19830-004 | 8 | 133 | 22 | 07/30/10 11:49:56 | 12.49 | 6.61 | 7.48 | 48270 | 31.42 |
| 19830-003 | 8 | 134 | 22 | 07/30/10 11:50:04 | 12.50 | 6.72 | 7.49 | 48182 | 31.36 |
| 19830-005 | 8 | 135 | 22 | 07/30/10 11:50:13 | 12.47 | 7.11 | 7.47 | 48202 | 31.37 |
| 19830-012 | 8 | 136 | 22 | 07/30/10 11:50:20 | 12.44 | 7.17 | 7.43 | 48232 | 31.39 |
| 19830-006 | 8 | 137 | 22 | 07/30/10 11:50:27 | 12.38 | 7.11 | 7.48 | 48354 | 31.48 |
| 19830-001 | 8 | 138 | 22 | 07/30/10 11:50:34 | 12.33 | 7.19 | 7.53 | 48362 | 31.48 |
| 19830-014 | 8 | 139 | 22 | 07/30/10 11:50:42 | 12.32 | 7.40 | 7.57 | 48389 | 31.50 |
| 19830-000 | 8 | 140 | 22 | 07/30/10 11:50:48 | 12.36 | 7.40 | 7.54 | 48415 | 31.52 |
| 19830-009 | 8 | 141 | 22 | 07/30/10 11:50:55 | 12.42 | 7.32 | 7.55 | 48432 | 31.54 |
| 19830-008 | 8 | 142 | 22 | 07/30/10 11:51:04 | 12.49 | 7.54 | 7.62 | 48428 | 31.54 |
| 19830-015 | 8 | 143 | 22 | 07/30/10 11:51:12 | 12.55 | 7.77 | 7.66 | 48495 | 31.59 |
| 19830-016 | 8 | 144 | 22 | 07/30/10 11:51:19 | 12.66 | 7.89 | 7.65 | 48436 | 31.55 |
| 19830-002 | 1 | 1 | 23 | 07/31/10 12:07:35 | 14.10 | 8.59 | 7.71 | 48826 | 31.88 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-016 | 1 | 2 | 23 | 07/31/10 12:08:23 | 14.18 | 7.91 | 7.70 | 48818 | 31.88 |
| 19830-015 | 1 | 3 | 23 | 07/31/10 12:08:46 | 14.18 | 7.80 | 7.73 | 48809 | 31.87 |
| 19830-017 | 1 | 4 | 23 | 07/31/10 12:09:14 | 14.16 | 7.48 | 7.67 | 48615 | 31.73 |
| 19830-001 | 1 | 5 | 23 | 07/31/10 12:09:40 | 14.00 | 7.36 | 7.70 | 48800 | 31.86 |
| 19830-011 | 1 | 6 | 23 | 07/31/10 12:10:12 | 14.09 | 7.39 | 7.67 | 48804 | 31.87 |
| 19830-014 | 1 | 7 | 23 | 07/31/10 12:10:31 | 14.10 | 7.37 | 7.67 | 48809 | 31.87 |
| 19830-009 | 1 | 8 | 23 | 07/31/10 12:10:53 | 13.98 | 7.26 | 7.69 | 48775 | 31.84 |
| 19830-012 | 1 | 9 | 23 | 07/31/10 12:11:15 | 14.01 | 7.29 | 7.69 | 48812 | 31.87 |
| 19830-010 | 1 | 10 | 23 | 07/31/10 12:11:33 | 14.01 | 7.54 | 7.70 | 48800 | 31.86 |
| 19830-008 | 1 | 11 | 23 | 07/31/10 12:12:06 | 14.06 | 7.52 | 7.72 | 48768 | 31.84 |
| 19830-006 | 1 | 12 | 23 | 07/31/10 12:12:35 | 14.10 | 7.71 | 7.71 | 48799 | 31.86 |
| 19830-004 | 1 | 13 | 23 | 07/31/10 12:12:56 | 13.91 | 7.74 | 7.67 | 48711 | 31.79 |
| 19830-013 | 1 | 14 | 23 | 07/31/10 12:13:25 | 13.89 | 7.46 | 7.65 | 48795 | 31.85 |
| 19830-000 | 1 | 15 | 23 | 07/31/10 12:13:50 | 13.95 | 7.60 | 7.65 | 48820 | 31.87 |
| 19830-005 | 1 | 16 | 23 | 07/31/10 12:14:19 | 13.87 | 7.88 | 7.72 | 48782 | 31.84 |
| 19830-007 | 1 | 17 | 23 | 07/31/10 12:14:45 | 13.81 | 8.08 | 7.68 | 48768 | 31.83 |
| 19830-003 | 1 | 18 | 23 | 07/31/10 12:15:19 | 13.79 | 7.90 | 7.64 | 48835 | 31.88 |
| 19830-009 | 2 | 19 | 23 | 07/31/10 12:15:49 | 14.03 | 7.79 | 7.69 | 48680 | 31.77 |
| 19830-016 | 2 | 20 | 23 | 07/31/10 12:16:08 | 14.12 | 7.66 | 7.70 | 48649 | 31.75 |
| 19830-007 | 2 | 21 | 23 | 07/31/10 12:16:24 | 14.19 | 7.58 | 7.64 | 48817 | 31.88 |
| 19830-015 | 2 | 22 | 23 | 07/31/10 12:16:41 | 14.17 | 7.40 | 7.67 | 48806 | 31.87 |
| 19830-008 | 2 | 23 | 23 | 07/31/10 12:17:03 | 14.17 | 7.52 | 7.71 | 48808 | 31.87 |
| 19830-002 | 2 | 24 | 23 | 07/31/10 12:17:20 | 14.22 | 7.41 | 7.69 | 48809 | 31.87 |
| 19830-012 | 2 | 25 | 23 | 07/31/10 12:17:46 | 14.18 | 7.32 | 7.66 | 48708 | 31.80 |
| 19830-004 | 2 | 26 | 23 | 07/31/10 12:17:59 | 14.10 | 7.31 | 7.65 | 48780 | 31.85 |
| 19830-000 | 2 | 27 | 23 | 07/31/10 12:18:27 | 14.07 | 7.56 | 7.66 | 48810 | 31.87 |
| 19830-003 | 2 | 28 | 23 | 07/31/10 12:18:48 | 14.08 | 7.58 | 7.64 | 48793 | 31.86 |
| 19830-011 | 2 | 29 | 23 | 07/31/10 12:19:06 | 14.02 | 7.56 | 7.68 | 48804 | 31.86 |
| 19830-017 | 2 | 30 | 23 | 07/31/10 12:19:28 | 14.08 | 7.54 | 7.65 | 48806 | 31.87 |
| 19830-014 | 2 | 31 | 23 | 07/31/10 12:19:50 | 14.01 | 7.31 | 7.66 | 48794 | 31.86 |
| 19830-001 | 2 | 32 | 23 | 07/31/10 12:20:09 | 13.90 | 6.99 | 7.66 | 48755 | 31.83 |
| 19830-013 | 2 | 33 | 23 | 07/31/10 12:20:37 | 13.91 | 7.14 | 7.66 | 48754 | 31.82 |
| 19830-010 | 2 | 34 | 23 | 07/31/10 12:21:09 | 13.96 | 7.33 | 7.66 | 48809 | 31.87 |
| 19830-006 | 2 | 35 | 23 | 07/31/10 12:22:05 | 13.99 | 7.14 | 7.59 | 48499 | 31.64 |
| 19830-005 | 2 | 36 | 23 | 07/31/10 12:22:33 | 14.12 | 7.23 | 7.65 | 48804 | 31.87 |
| 19830-013 | 3 | 37 | 23 | 07/31/10 12:22:58 | 14.13 | 7.27 | 7.65 | 48803 | 31.87 |
| 19830-009 | 3 | 38 | 23 | 07/31/10 12:23:20 | 14.10 | 7.31 | 7.64 | 48797 | 31.86 |
| 19830-017 | 3 | 39 | 23 | 07/31/10 12:23:44 | 14.16 | 7.17 | 7.60 | 48805 | 31.87 |
| 19830-016 | 3 | 40 | 23 | 07/31/10 12:24:04 | 14.00 | 7.11 | 7.61 | 48767 | 31.84 |
| 19830-000 | 3 | 41 | 23 | 07/31/10 12:24:34 | 14.18 | 7.63 | 7.66 | 48773 | 31.85 |
| 19830-010 | 3 | 42 | 23 | 07/31/10 12:24:56 | 14.14 | 7.42 | 7.61 | 48793 | 31.86 |
| 19830-008 | 3 | 43 | 23 | 07/31/10 12:25:23 | 13.85 | 7.37 | 7.64 | 48805 | 31.86 |
| 19830-014 | 3 | 44 | 23 | 07/31/10 12:25:45 | 14.04 | 7.23 | 7.67 | 48778 | 31.85 |
| 19830-004 | 3 | 45 | 23 | 07/31/10 12:26:06 | 14.07 | 7.12 | 7.64 | 48792 | 31.86 |
| 19830-006 | 3 | 46 | 23 | 07/31/10 12:26:34 | 14.01 | 7.13 | 7.66 | 48801 | 31.86 |
| 19830-005 | 3 | 47 | 23 | 07/31/10 12:26:56 | 14.05 | 7.36 | 7.68 | 48813 | 31.87 |
| 19830-011 | 3 | 48 | 23 | 07/31/10 12:27:18 | 13.78 | 7.55 | 7.70 | 48814 | 31.86 |
| 19830-002 | 3 | 49 | 23 | 07/31/10 12:27:37 | 13.92 | 7.39 | 7.67 | 48844 | 31.89 |
| 19830-012 | 3 | 50 | 23 | 07/31/10 12:27:57 | 13.87 | 7.35 | 7.68 | 48796 | 31.85 |
| 19830-001 | 3 | 51 | 23 | 07/31/10 12:28:44 | 12.83 | 7.75 | 7.72 | 48115 | 31.32 |
| 19830-003 | 3 | 52 | 23 | 07/31/10 12:29:09 | 12.90 | 7.96 | 7.71 | 48638 | 31.71 |
| 19830-007 | 3 | 53 | 23 | 07/31/10 12:29:27 | 12.97 | 7.82 | 7.61 | 48522 | 31.62 |
| 19830-015 | 3 | 54 | 23 | 07/31/10 12:29:48 | 13.03 | 7.74 | 7.72 | 48382 | 31.52 |
| 19830-006 | 4 | 55 | 23 | 07/31/10 12:30:09 | 12.94 | 8.06 | 7.77 | 48872 | 31.88 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 4 | 56 | 23 | 07/31/10 12:30:44 | 12.93 | 7.84 | 7.80 | 48885 | 31.89 |
| 19830-012 | 4 | 57 | 23 | 07/31/10 12:31:02 | 12.91 | 7.92 | 7.78 | 48909 | 31.90 |
| 19830-010 | 4 | 58 | 23 | 07/31/10 12:31:24 | 12.80 | 8.13 | 7.76 | 48885 | 31.88 |
| 19830-015 | 4 | 59 | 23 | 07/31/10 12:31:59 | 12.59 | 7.84 | 7.63 | 48816 | 31.82 |
| 19830-009 | 4 | 60 | 23 | 07/31/10 12:32:33 | 12.59 | 8.18 | 7.75 | 48294 | 31.44 |
| 19830-001 | 4 | 61 | 23 | 07/31/10 12:32:52 | 12.67 | 7.91 | 7.76 | 47128 | 30.61 |
| 19830-016 | 4 | 62 | 23 | 07/31/10 12:33:11 | 12.88 | 7.61 | 7.66 | 48890 | 31.89 |
| 19830-008 | 4 | 63 | 23 | 07/31/10 12:33:37 | 13.00 | 7.61 | 7.69 | 48889 | 31.89 |
| 19830-004 | 4 | 64 | 23 | 07/31/10 12:33:56 | 13.07 | 7.41 | 7.65 | 48694 | 31.75 |
| 19830-007 | 4 | 65 | 23 | 07/31/10 12:49:34 | 12.78 | 8.05 | 7.55 | 47626 | 30.97 |
| 19830-014 | 4 | 66 | 23 | 07/31/10 12:49:57 | 12.91 | 7.75 | 7.58 | 48909 | 31.90 |
| 19830-000 | 4 | 67 | 23 | 07/31/10 12:50:13 | 12.93 | 7.52 | 7.58 | 48892 | 31.89 |
| 19830-017 | 4 | 68 | 23 | 07/31/10 12:50:40 | 13.00 | 7.94 | 7.54 | 48881 | 31.89 |
| 19830-013 | 4 | 69 | 23 | 07/31/10 12:50:57 | 13.02 | 7.61 | 7.60 | 48896 | 31.90 |
| 19830-002 | 4 | 70 | 23 | 07/31/10 12:51:14 | 13.02 | 7.64 | 7.65 | 48884 | 31.89 |
| 19830-005 | 4 | 71 | 23 | 07/31/10 12:51:27 | 13.01 | 7.65 | 7.68 | 48856 | 31.87 |
| 19830-003 | 4 | 72 | 23 | 07/31/10 12:51:40 | 12.91 | 7.82 | 7.65 | 48818 | 31.84 |
| 19830-016 | 5 | 73 | 23 | 07/31/10 12:52:07 | 12.87 | 7.55 | 7.61 | 48892 | 31.89 |
| 19830-003 | 5 | 74 | 23 | 07/31/10 12:52:31 | 12.98 | 7.15 | 7.56 | 48863 | 31.87 |
| 19830-000 | 5 | 75 | 23 | 07/31/10 12:53:03 | 13.12 | 7.30 | 7.58 | 48866 | 31.88 |
| 19830-013 | 5 | 76 | 23 | 07/31/10 12:53:24 | 13.16 | 7.34 | 7.58 | 48858 | 31.88 |
| 19830-001 | 5 | 77 | 23 | 07/31/10 12:53:50 | 13.18 | 7.51 | 7.67 | 48846 | 31.87 |
| 19830-002 | 5 | 78 | 23 | 07/31/10 12:54:12 | 13.24 | 7.53 | 7.59 | 48871 | 31.89 |
| 19830-004 | 5 | 79 | 23 | 07/31/10 12:54:33 | 13.21 | 7.28 | 7.57 | 48851 | 31.87 |
| 19830-012 | 5 | 80 | 23 | 07/31/10 12:54:56 | 13.15 | 7.58 | 7.66 | 48742 | 31.79 |
| 19830-005 | 5 | 81 | 23 | 07/31/10 12:56:31 | 13.03 | 7.79 | 7.71 | 48884 | 31.89 |
| 19830-011 | 5 | 82 | 23 | 07/31/10 12:57:01 | 13.16 | 7.76 | 7.70 | 48882 | 31.89 |
| 19830-010 | 5 | 83 | 23 | 07/31/10 12:57:17 | 13.16 | 7.71 | 7.71 | 48885 | 31.89 |
| 19830-017 | 5 | 84 | 23 | 07/31/10 12:57:36 | 13.48 | 7.32 | 7.62 | 48882 | 31.90 |
| 19830-009 | 5 | 85 | 23 | 07/31/10 12:57:59 | 13.47 | 7.06 | 7.66 | 48842 | 31.87 |
| 19830-006 | 5 | 86 | 23 | 07/31/10 12:58:24 | 13.23 | 7.43 | 7.61 | 48819 | 31.85 |
| 19830-008 | 5 | 87 | 23 | 07/31/10 12:58:42 | 13.49 | 7.56 | 7.67 | 48905 | 31.92 |
| 19830-007 | 5 | 88 | 23 | 07/31/10 12:59:03 | 13.49 | 7.67 | 7.63 | 48858 | 31.89 |
| 19830-014 | 5 | 89 | 23 | 07/31/10 12:59:30 | 13.45 | 7.61 | 7.69 | 48839 | 31.87 |
| 19830-015 | 5 | 90 | 23 | 07/31/10 12:59:43 | 13.52 | 7.60 | 7.69 | 48884 | 31.91 |
| 19830-005 | 6 | 91 | 23 | 07/31/10 12:59:59 | 13.61 | 7.80 | 7.73 | 48842 | 31.88 |
| 19830-007 | 6 | 92 | 23 | 07/31/10 13:00:10 | 13.65 | 7.89 | 7.70 | 48891 | 31.92 |
| 19830-002 | 6 | 93 | 23 | 07/31/10 13:00:27 | 13.77 | 7.87 | 7.69 | 48832 | 31.88 |
| 19830-009 | 6 | 94 | 23 | 07/31/10 13:00:41 | 13.89 | 7.71 | 7.70 | 48803 | 31.86 |
| 19830-013 | 6 | 95 | 23 | 07/31/10 13:01:00 | 13.88 | 7.74 | 7.70 | 48801 | 31.86 |
| 19830-004 | 6 | 96 | 23 | 07/31/10 13:01:18 | 13.86 | 7.86 | 7.70 | 48791 | 31.85 |
| 19830-012 | 6 | 97 | 23 | 07/31/10 13:11:35 | 12.70 | 7.49 | 7.75 | 48967 | 31.94 |
| 19830-015 | 6 | 98 | 23 | 07/31/10 13:11:53 | 12.67 | 7.78 | 7.73 | 48931 | 31.91 |
| 19830-014 | 6 | 99 | 23 | 07/31/10 13:12:10 | 12.61 | 7.74 | 7.73 | 48917 | 31.90 |
| 19830-003 | 6 | 100 | 23 | 07/31/10 13:12:21 | 12.58 | 7.71 | 7.70 | 48881 | 31.87 |
| 19830-010 | 6 | 101 | 23 | 07/31/10 13:12:44 | 12.55 | 8.16 | 7.75 | 48961 | 31.93 |
| 19830-000 | 6 | 102 | 23 | 07/31/10 13:13:14 | 12.60 | 8.06 | 7.69 | 48814 | 31.82 |
| 19830-016 | 6 | 103 | 23 | 07/31/10 13:13:41 | 12.57 | 7.90 | 7.71 | 48864 | 31.86 |
| 19830-001 | 6 | 104 | 23 | 07/31/10 13:14:09 | 12.46 | 8.00 | 7.79 | 48724 | 31.75 |
| 19830-017 | 6 | 105 | 23 | 07/31/10 13:14:31 | 12.34 | 8.11 | 7.72 | 48934 | 31.90 |
| 19830-008 | 6 | 106 | 23 | 07/31/10 13:14:49 | 12.34 | 8.16 | 7.81 | 48963 | 31.92 |
| 19830-011 | 6 | 107 | 23 | 07/31/10 13:15:03 | 12.44 | 8.13 | 7.78 | 48969 | 31.93 |
| 19830-006 | 6 | 108 | 23 | 07/31/10 13:15:20 | 12.57 | 7.97 | 7.73 | 48983 | 31.94 |
| 19830-015 | 7 | 109 | 23 | 07/31/10 13:15:39 | 12.71 | 7.99 | 7.72 | 48969 | 31.94 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-017 | 7 | 110 | 23 | 07/31/10 13:15:52 | 12.81 | 7.88 | 7.70 | 48938 | 31.92 |
| 19830-003 | 7 | 111 | 23 | 07/31/10 13:16:07 | 12.90 | 7.87 | 7.66 | 48928 | 31.92 |
| 19830-008 | 7 | 112 | 23 | 07/31/10 13:16:30 | 12.96 | 7.88 | 7.71 | 48934 | 31.92 |
| 19830-006 | 7 | 113 | 23 | 07/31/10 13:16:53 | 13.07 | 8.03 | 7.68 | 48787 | 31.82 |
| 19830-012 | 7 | 114 | 23 | 07/31/10 13:17:09 | 13.16 | 7.87 | 7.67 | 48866 | 31.88 |
| 19830-004 | 7 | 115 | 23 | 07/31/10 13:17:26 | 13.14 | 7.78 | 7.68 | 48851 | 31.87 |
| 19830-011 | 7 | 116 | 23 | 07/31/10 13:17:43 | 13.14 | 7.71 | 7.71 | 48863 | 31.88 |
| 19830-014 | 7 | 117 | 23 | 07/31/10 13:18:01 | 13.08 | 7.65 | 7.75 | 48867 | 31.88 |
| 19830-005 | 7 | 118 | 23 | 07/31/10 13:18:18 | 13.05 | 7.91 | 7.71 | 48815 | 31.84 |
| 19830-001 | 7 | 119 | 23 | 07/31/10 13:18:32 | 13.00 | 7.83 | 7.72 | 48830 | 31.85 |
| 19830-000 | 7 | 120 | 23 | 07/31/10 13:18:49 | 12.92 | 7.88 | 7.68 | 48869 | 31.87 |
| 19830-009 | 7 | 121 | 23 | 07/31/10 13:19:06 | 12.69 | 7.90 | 7.66 | 48830 | 31.84 |
| 19830-010 | 7 | 122 | 23 | 07/31/10 13:19:22 | 12.73 | 7.55 | 7.64 | 48931 | 31.91 |
| 19830-007 | 7 | 123 | 23 | 07/31/10 13:19:35 | 12.74 | 7.40 | 7.60 | 48905 | 31.89 |
| 19830-002 | 7 | 124 | 23 | 07/31/10 13:19:51 | 12.77 | 7.46 | 7.62 | 48931 | 31.91 |
| 19830-013 | 7 | 125 | 23 | 07/31/10 13:20:14 | 12.83 | 7.59 | 7.63 | 48804 | 31.82 |
| 19830-016 | 7 | 126 | 23 | 07/31/10 13:20:28 | 12.94 | 7.65 | 7.61 | 48971 | 31.95 |
| 19830-017 | 8 | 127 | 23 | 07/31/10 13:20:43 | 13.07 | 7.50 | 7.59 | 48915 | 31.91 |
| 19830-013 | 8 | 128 | 23 | 07/31/10 13:21:08 | 13.10 | 7.49 | 7.63 | 48884 | 31.89 |
| 19830-010 | 8 | 129 | 23 | 07/31/10 13:21:34 | 13.14 | 7.81 | 7.70 | 48893 | 31.90 |
| 19830-007 | 8 | 130 | 23 | 07/31/10 13:21:48 | 13.21 | 7.73 | 7.65 | 48803 | 31.84 |
| 19830-011 | 8 | 131 | 23 | 07/31/10 13:22:23 | 13.22 | 6.30 | 7.65 | 48840 | 31.86 |
| 19830-002 | 8 | 132 | 23 | 07/31/10 13:22:57 | 13.20 | 6.51 | 7.65 | 48917 | 31.92 |
| 19830-004 | 8 | 133 | 23 | 07/31/10 13:23:26 | 13.50 | 7.20 | 7.61 | 48844 | 31.88 |
| 19830-003 | 8 | 134 | 23 | 07/31/10 13:23:40 | 13.62 | 7.27 | 7.63 | 48853 | 31.89 |
| 19830-005 | 8 | 135 | 23 | 07/31/10 13:23:58 | 13.52 | 7.33 | 7.58 | 48808 | 31.85 |
| 19830-012 | 8 | 136 | 23 | 07/31/10 13:24:22 | 13.51 | 7.28 | 7.68 | 48835 | 31.87 |
| 19830-006 | 8 | 137 | 23 | 07/31/10 13:24:45 | 13.38 | 7.57 | 7.66 | 48862 | 31.89 |
| 19830-001 | 8 | 138 | 23 | 07/31/10 13:25:02 | 13.48 | 7.66 | 7.72 | 48828 | 31.86 |
| 19830-014 | 8 | 139 | 23 | 07/31/10 13:25:18 | 13.42 | 7.63 | 7.68 | 48910 | 31.92 |
| 19830-000 | 8 | 140 | 23 | 07/31/10 13:25:39 | 13.70 | 7.58 | 7.67 | 48870 | 31.90 |
| 19830-009 | 8 | 141 | 23 | 07/31/10 13:25:56 | 13.89 | 7.81 | 7.70 | 48855 | 31.90 |
| 19830-008 | 8 | 142 | 23 | 07/31/10 13:26:16 | 13.70 | 7.95 | 7.73 | 48786 | 31.84 |
| 19830-015 | 8 | 143 | 23 | 07/31/10 13:26:39 | 13.83 | 7.93 | 7.73 | 48702 | 31.78 |
| 19830-016 | 8 | 144 | 23 | 07/31/10 13:27:12 | 13.88 | 7.75 | 7.67 | 48817 | 31.87 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 24 | 08/01/10 13:14:34 | 13.20 | 8.18 | 7.56 | 48237 | 31.43 |
| 19830-016 | 1 | 2 | 24 | 08/01/10 13:15:03 | 13.10 | 7.98 | 7.55 | 48277 | 31.45 |
| 19830-015 | 1 | 3 | 24 | 08/01/10 13:15:15 | 13.04 | 7.97 | 7.58 | 48309 | 31.47 |
| 19830-017 | 1 | 4 | 24 | 08/01/10 13:15:29 | 13.07 | 7.66 | 7.52 | 48314 | 31.48 |
| 19830-001 | 1 | 5 | 24 | 08/01/10 13:16:14 | 13.02 | 7.33 | 7.58 | 47752 | 31.07 |
| 19830-011 | 1 | 6 | 24 | 08/01/10 13:16:29 | 12.99 | 7.11 | 7.55 | 48315 | 31.48 |
| 19830-014 | 1 | 7 | 24 | 08/01/10 13:16:40 | 12.99 | 7.34 | 7.52 | 48314 | 31.47 |
| 19830-009 | 1 | 8 | 24 | 08/01/10 13:16:57 | 12.92 | 6.78 | 7.53 | 48297 | 31.46 |
| 19830-012 | 1 | 9 | 24 | 08/01/10 13:17:14 | 12.93 | 6.65 | 7.58 | 48309 | 31.47 |
| 19830-010 | 1 | 10 | 24 | 08/01/10 13:17:52 | 12.87 | 7.42 | 7.62 | 48304 | 31.46 |
| 19830-008 | 1 | 11 | 24 | 08/01/10 13:18:02 | 12.84 | 7.51 | 7.65 | 48326 | 31.48 |
| 19830-006 | 1 | 12 | 24 | 08/01/10 13:18:13 | 12.84 | 7.53 | 7.67 | 48296 | 31.46 |
| 19830-004 | 1 | 13 | 24 | 08/01/10 13:18:25 | 12.81 | 7.82 | 7.59 | 48309 | 31.46 |
| 19830-013 | 1 | 14 | 24 | 08/01/10 13:18:35 | 12.78 | 7.81 | 7.51 | 48323 | 31.47 |
| 19830-000 | 1 | 15 | 24 | 08/01/10 13:18:46 | 12.75 | 7.70 | 7.49 | 48319 | 31.47 |
| 19830-005 | 1 | 16 | 24 | 08/01/10 13:18:57 | 12.70 | 7.73 | 7.60 | 48301 | 31.45 |
| 19830-007 | 1 | 17 | 24 | 08/01/10 13:19:09 | 12.66 | 8.07 | 7.64 | 48346 | 31.49 |
| 19830-003 | 1 | 18 | 24 | 08/01/10 13:19:22 | 12.70 | 8.26 | 7.57 | 48360 | 31.50 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2 | 19 | 24 | 08/01/10 13:19:35 | 12.82 | 8.13 | 7.55 | 48487 | 31.59 |
| 19830-016 | 2 | 20 | 24 | 08/01/10 13:19:44 | 12.94 | 8.08 | 7.57 | 48367 | 31.51 |
| 19830-007 | 2 | 21 | 24 | 08/01/10 13:19:58 | 12.98 | 7.85 | 7.46 | 48282 | 31.45 |
| 19830-015 | 2 | 22 | 24 | 08/01/10 13:20:27 | 13.03 | 7.45 | 7.55 | 48281 | 31.45 |
| 19830-008 | 2 | 23 | 24 | 08/01/10 13:20:41 | 13.06 | 7.46 | 7.61 | 48291 | 31.46 |
| 19830-002 | 2 | 24 | 24 | 08/01/10 13:20:48 | 13.07 | 7.56 | 7.60 | 48281 | 31.45 |
| 19830-012 | 2 | 25 | 24 | 08/01/10 13:20:56 | 13.05 | 7.58 | 7.55 | 48224 | 31.41 |
| 19830-004 | 2 | 26 | 24 | 08/01/10 13:21:08 | 12.98 | 7.47 | 7.48 | 48233 | 31.42 |
| 19830-000 | 2 | 27 | 24 | 08/01/10 13:21:17 | 12.91 | 7.31 | 7.46 | 48243 | 31.42 |
| 19830-003 | 2 | 28 | 24 | 08/01/10 13:21:28 | 12.88 | 7.56 | 7.47 | 48254 | 31.43 |
| 19830-011 | 2 | 29 | 24 | 08/01/10 13:21:37 | 12.87 | 7.75 | 7.49 | 48264 | 31.43 |
| 19830-017 | 2 | 30 | 24 | 08/01/10 13:21:45 | 12.86 | 7.79 | 7.52 | 48278 | 31.44 |
| 19830-014 | 2 | 31 | 24 | 08/01/10 13:21:54 | 12.84 | 7.78 | 7.47 | 48262 | 31.43 |
| 19830-001 | 2 | 32 | 24 | 08/01/10 13:22:07 | 12.78 | 7.12 | 7.43 | 47064 | 30.56 |
| 19830-013 | 2 | 33 | 24 | 08/01/10 13:22:32 | 12.75 | 7.00 | 7.48 | 48296 | 31.45 |
| 19830-010 | 2 | 34 | 24 | 08/01/10 13:22:40 | 12.77 | 7.31 | 7.49 | 48318 | 31.47 |
| 19830-006 | 2 | 35 | 24 | 08/01/10 13:22:55 | 12.86 | 7.51 | 7.43 | 48408 | 31.54 |
| 19830-005 | 2 | 36 | 24 | 08/01/10 13:23:07 | 12.91 | 7.37 | 7.47 | 48351 | 31.50 |
| 19830-013 | 3 | 37 | 24 | 08/01/10 13:23:17 | 12.90 | 7.45 | 7.49 | 48328 | 31.48 |
| 19830-009 | 3 | 38 | 24 | 08/01/10 13:23:28 | 12.94 | 7.28 | 7.49 | 48341 | 31.49 |
| 19830-017 | 3 | 39 | 24 | 08/01/10 13:23:39 | 13.01 | 7.31 | 7.41 | 48257 | 31.43 |
| 19830-016 | 3 | 40 | 24 | 08/01/10 13:23:51 | 12.92 | 6.86 | 7.37 | 48248 | 31.42 |
| 19830-000 | 3 | 41 | 24 | 08/01/10 13:24:05 | 12.92 | 7.19 | 7.47 | 48298 | 31.46 |
| 19830-010 | 3 | 42 | 24 | 08/01/10 13:24:16 | 12.96 | 7.66 | 7.40 | 48304 | 31.47 |
| 19830-008 | 3 | 43 | 24 | 08/01/10 13:24:29 | 12.91 | 6.79 | 7.40 | 48272 | 31.44 |
| 19830-014 | 3 | 44 | 24 | 08/01/10 13:24:44 | 12.92 | 7.03 | 7.46 | 48284 | 31.45 |
| 19830-004 | 3 | 45 | 24 | 08/01/10 13:24:51 | 12.92 | 7.12 | 7.45 | 48269 | 31.44 |
| 19830-006 | 3 | 46 | 24 | 08/01/10 13:25:02 | 12.90 | 7.12 | 7.42 | 48047 | 31.28 |
| 19830-005 | 3 | 47 | 24 | 08/01/10 13:25:15 | 12.88 | 7.13 | 7.50 | 48290 | 31.45 |
| 19830-011 | 3 | 48 | 24 | 08/01/10 13:25:23 | 12.75 | 7.41 | 7.53 | 48154 | 31.35 |
| 19830-002 | 3 | 49 | 24 | 08/01/10 13:25:30 | 12.71 | 7.67 | 7.54 | 48425 | 31.54 |
| 19830-012 | 3 | 50 | 24 | 08/01/10 13:25:43 | 12.78 | 7.50 | 7.52 | 48281 | 31.44 |
| 19830-001 | 3 | 51 | 24 | 08/01/10 13:26:09 | 12.55 | 8.03 | 7.66 | 48334 | 31.47 |
| 19830-003 | 3 | 52 | 24 | 08/01/10 13:26:25 | 12.57 | 8.10 | 7.65 | 48343 | 31.48 |
| 19830-007 | 3 | 53 | 24 | 08/01/10 13:26:35 | 12.60 | 8.23 | 7.57 | 48388 | 31.51 |
| 19830-015 | 3 | 54 | 24 | 08/01/10 13:26:44 | 12.60 | 8.08 | 7.57 | 48382 | 31.51 |
| 19830-006 | 4 | 55 | 24 | 08/01/10 13:26:53 | 12.57 | 8.08 | 7.68 | 48332 | 31.47 |
| 19830-011 | 4 | 56 | 24 | 08/01/10 13:27:04 | 12.55 | 8.32 | 7.76 | 48327 | 31.47 |
| 19830-012 | 4 | 57 | 24 | 08/01/10 13:27:13 | 12.50 | 8.39 | 7.76 | 48356 | 31.49 |
| 19830-010 | 4 | 58 | 24 | 08/01/10 13:27:21 | 12.43 | 8.44 | 7.74 | 48308 | 31.45 |
| 19830-015 | 4 | 59 | 24 | 08/01/10 13:27:29 | 12.31 | 8.51 | 7.71 | 48297 | 31.44 |
| 19830-009 | 4 | 60 | 24 | 08/01/10 13:27:38 | 12.26 | 8.46 | 7.70 | 48375 | 31.49 |
| 19830-001 | 4 | 61 | 24 | 08/01/10 13:27:46 | 12.27 | 8.37 | 7.70 | 48457 | 31.55 |
| 19830-016 | 4 | 62 | 24 | 08/01/10 13:27:56 | 12.43 | 8.16 | 7.64 | 48493 | 31.58 |
| 19830-008 | 4 | 63 | 24 | 08/01/10 13:28:04 | 12.53 | 8.05 | 7.60 | 48547 | 31.63 |
| 19830-004 | 4 | 64 | 24 | 08/01/10 13:28:12 | 12.66 | 7.97 | 7.58 | 48484 | 31.59 |
| 19830-007 | 4 | 65 | 24 | 08/01/10 13:28:24 | 12.58 | 7.78 | 7.50 | 48250 | 31.41 |
| 19830-014 | 4 | 66 | 24 | 08/01/10 13:28:31 | 12.52 | 7.81 | 7.48 | 48407 | 31.52 |
| 19830-000 | 4 | 67 | 24 | 08/01/10 13:28:42 | 12.56 | 7.73 | 7.47 | 48358 | 31.49 |
| 19830-017 | 4 | 68 | 24 | 08/01/10 13:28:50 | 12.57 | 7.66 | 7.46 | 48348 | 31.48 |
| 19830-013 | 4 | 69 | 24 | 08/01/10 13:28:58 | 12.59 | 7.56 | 7.45 | 48337 | 31.48 |
| 19830-002 | 4 | 70 | 24 | 08/01/10 13:29:06 | 12.60 | 7.55 | 7.49 | 48331 | 31.47 |
| 19830-005 | 4 | 71 | 24 | 08/01/10 13:29:14 | 12.60 | 7.70 | 7.56 | 48295 | 31.45 |
| 19830-003 | 4 | 72 | 24 | 08/01/10 13:29:22 | 12.58 | 7.85 | 7.57 | 48259 | 31.42 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-016 | 5 | 73 | 24 | 08/01/10 13:29:32 | 12.53 | 8.00 | 7.56 | 48360 | 31.49 |
| 19830-003 | 5 | 74 | 24 | 08/01/10 13:29:42 | 12.58 | 7.93 | 7.52 | 48355 | 31.49 |
| 19830-000 | 5 | 75 | 24 | 08/01/10 13:29:51 | 12.67 | 7.67 | 7.47 | 48366 | 31.50 |
| 19830-013 | 5 | 76 | 24 | 08/01/10 13:30:01 | 12.74 | 7.59 | 7.48 | 48336 | 31.48 |
| 19830-001 | 5 | 77 | 24 | 08/01/10 13:30:09 | 12.78 | 7.58 | 7.51 | 47718 | 31.04 |
| 19830-002 | 5 | 78 | 24 | 08/01/10 13:30:20 | 12.85 | 7.64 | 7.50 | 48342 | 31.49 |
| 19830-004 | 5 | 79 | 24 | 08/01/10 13:30:27 | 12.88 | 7.63 | 7.45 | 48304 | 31.46 |
| 19830-012 | 5 | 80 | 24 | 08/01/10 13:30:34 | 12.89 | 7.56 | 7.48 | 48293 | 31.46 |
| 19830-005 | 5 | 81 | 24 | 08/01/10 13:30:46 | 12.67 | 7.86 | 7.58 | 48149 | 31.34 |
| 19830-011 | 5 | 82 | 24 | 08/01/10 13:30:53 | 12.59 | 7.98 | 7.59 | 48269 | 31.43 |
| 19830-010 | 5 | 83 | 24 | 08/01/10 13:31:01 | 12.55 | 7.96 | 7.60 | 48314 | 31.46 |
| 19830-017 | 5 | 84 | 24 | 08/01/10 13:31:08 | 12.55 | 7.95 | 7.57 | 48356 | 31.49 |
| 19830-009 | 5 | 85 | 24 | 08/01/10 13:31:16 | 12.57 | 7.85 | 7.52 | 48334 | 31.47 |
| 19830-006 | 5 | 86 | 24 | 08/01/10 13:31:27 | 12.57 | 7.50 | 7.50 | 48381 | 31.51 |
| 19830-008 | 5 | 87 | 24 | 08/01/10 13:31:36 | 12.61 | 7.51 | 7.54 | 48352 | 31.49 |
| 19830-007 | 5 | 88 | 24 | 08/01/10 13:31:43 | 12.60 | 7.67 | 7.57 | 48272 | 31.43 |
| 19830-014 | 5 | 89 | 24 | 08/01/10 13:31:52 | 12.51 | 7.87 | 7.54 | 48340 | 31.47 |
| 19830-015 | 5 | 90 | 24 | 08/01/10 13:32:00 | 12.52 | 8.02 | 7.55 | 48374 | 31.50 |
| 19830-005 | 6 | 91 | 24 | 08/01/10 13:32:09 | 12.57 | 8.07 | 7.61 | 48376 | 31.50 |
| 19830-007 | 6 | 92 | 24 | 08/01/10 13:32:18 | 12.62 | 8.14 | 7.61 | 48342 | 31.48 |
| 19830-002 | 6 | 93 | 24 | 08/01/10 13:32:28 | 12.66 | 8.14 | 7.56 | 48348 | 31.49 |
| 19830-009 | 6 | 94 | 24 | 08/01/10 13:32:39 | 12.71 | 7.95 | 7.54 | 48337 | 31.48 |
| 19830-013 | 6 | 95 | 24 | 08/01/10 13:32:49 | 12.74 | 7.58 | 7.54 | 48331 | 31.48 |
| 19830-004 | 6 | 96 | 24 | 08/01/10 13:32:56 | 12.76 | 7.55 | 7.53 | 48358 | 31.50 |
| 19830-012 | 6 | 97 | 24 | 08/01/10 13:33:14 | 12.58 | 7.94 | 7.57 | 48274 | 31.43 |
| 19830-015 | 6 | 98 | 24 | 08/01/10 13:33:22 | 12.51 | 7.99 | 7.60 | 48295 | 31.44 |
| 19830-014 | 6 | 99 | 24 | 08/01/10 13:33:31 | 12.46 | 7.96 | 7.62 | 48330 | 31.46 |
| 19830-003 | 6 | 100 | 24 | 08/01/10 13:33:39 | 12.41 | 8.00 | 7.62 | 48400 | 31.51 |
| 19830-010 | 6 | 101 | 24 | 08/01/10 13:33:47 | 12.38 | 8.08 | 7.62 | 48464 | 31.56 |
| 19830-000 | 6 | 102 | 24 | 08/01/10 13:33:53 | 12.40 | 8.17 | 7.62 | 48412 | 31.52 |
| 19830-016 | 6 | 103 | 24 | 08/01/10 13:34:01 | 12.40 | 8.27 | 7.62 | 48385 | 31.50 |
| 19830-001 | 6 | 104 | 24 | 08/01/10 13:34:07 | 12.39 | 8.32 | 7.64 | 48336 | 31.47 |
| 19830-017 | 6 | 105 | 24 | 08/01/10 13:34:16 | 12.30 | 8.35 | 7.66 | 48333 | 31.46 |
| 19830-008 | 6 | 106 | 24 | 08/01/10 13:34:24 | 12.27 | 8.42 | 7.67 | 48425 | 31.53 |
| 19830-011 | 6 | 107 | 24 | 08/01/10 13:34:32 | 12.28 | 8.47 | 7.70 | 48527 | 31.60 |
| 19830-006 | 6 | 108 | 24 | 08/01/10 13:34:40 | 12.40 | 8.41 | 7.68 | 48557 | 31.63 |
| 19830-015 | 7 | 109 | 24 | 08/01/10 13:34:50 | 12.58 | 8.35 | 7.65 | 48544 | 31.62 |
| 19830-017 | 7 | 110 | 24 | 08/01/10 13:34:59 | 12.71 | 8.26 | 7.63 | 48502 | 31.60 |
| 19830-003 | 7 | 111 | 24 | 08/01/10 13:35:07 | 12.79 | 8.22 | 7.60 | 48468 | 31.58 |
| 19830-008 | 7 | 112 | 24 | 08/01/10 13:35:14 | 12.86 | 8.20 | 7.60 | 48472 | 31.58 |
| 19830-006 | 7 | 113 | 24 | 08/01/10 13:35:26 | 12.84 | 8.28 | 7.63 | 48326 | 31.48 |
| 19830-012 | 7 | 114 | 24 | 08/01/10 13:35:34 | 12.88 | 8.32 | 7.61 | 48291 | 31.45 |
| 19830-004 | 7 | 115 | 24 | 08/01/10 13:35:41 | 12.88 | 8.28 | 7.60 | 48242 | 31.42 |
| 19830-011 | 7 | 116 | 24 | 08/01/10 13:35:48 | 12.86 | 8.23 | 7.61 | 48243 | 31.42 |
| 19830-014 | 7 | 117 | 24 | 08/01/10 13:35:57 | 12.82 | 8.10 | 7.64 | 48238 | 31.41 |
| 19830-005 | 7 | 118 | 24 | 08/01/10 13:36:05 | 12.79 | 8.12 | 7.65 | 48234 | 31.41 |
| 19830-001 | 7 | 119 | 24 | 08/01/10 13:36:13 | 12.76 | 8.21 | 7.62 | 48228 | 31.40 |
| 19830-000 | 7 | 120 | 24 | 08/01/10 13:36:20 | 12.72 | 8.20 | 7.62 | 48215 | 31.39 |
| 19830-009 | 7 | 121 | 24 | 08/01/10 13:36:29 | 12.59 | 8.21 | 7.58 | 48170 | 31.36 |
| 19830-010 | 7 | 122 | 24 | 08/01/10 13:36:37 | 12.46 | 8.21 | 7.56 | 48408 | 31.52 |
| 19830-007 | 7 | 123 | 24 | 08/01/10 13:36:45 | 12.50 | 8.12 | 7.53 | 48350 | 31.48 |
| 19830-002 | 7 | 124 | 24 | 08/01/10 13:36:54 | 12.52 | 8.00 | 7.51 | 48409 | 31.52 |
| 19830-013 | 7 | 125 | 24 | 08/01/10 13:37:02 | 12.57 | 7.95 | 7.51 | 48441 | 31.55 |
| 19830-016 | 7 | 126 | 24 | 08/01/10 13:37:12 | 12.69 | 7.95 | 7.51 | 48460 | 31.57 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-017 | 8 | 127 | 24 | 08/01/10 13:37:22 | 12.83 | 7.89 | 7.49 | 48415 | 31.54 |
| 19830-013 | 8 | 128 | 24 | 08/01/10 13:37:31 | 12.92 | 7.79 | 7.50 | 48379 | 31.52 |
| 19830-010 | 8 | 129 | 24 | 08/01/10 13:37:45 | 12.92 | 7.95 | 7.58 | 48314 | 31.47 |
| 19830-007 | 8 | 130 | 24 | 08/01/10 13:37:51 | 12.93 | 8.01 | 7.61 | 48253 | 31.43 |
| 19830-011 | 8 | 131 | 24 | 08/01/10 13:37:59 | 12.89 | 8.03 | 7.55 | 48212 | 31.40 |
| 19830-002 | 8 | 132 | 24 | 08/01/10 13:38:06 | 12.83 | 7.79 | 7.50 | 48193 | 31.38 |
| 19830-004 | 8 | 133 | 24 | 08/01/10 13:38:17 | 12.82 | 7.16 | 7.49 | 48310 | 31.47 |
| 19830-003 | 8 | 134 | 24 | 08/01/10 13:38:25 | 12.80 | 7.14 | 7.49 | 48287 | 31.45 |
| 19830-005 | 8 | 135 | 24 | 08/01/10 13:38:35 | 12.76 | 7.36 | 7.46 | 48221 | 31.40 |
| 19830-012 | 8 | 136 | 24 | 08/01/10 13:38:43 | 12.65 | 7.34 | 7.45 | 48245 | 31.41 |
| 19830-006 | 8 | 137 | 24 | 08/01/10 13:38:52 | 12.56 | 7.31 | 7.50 | 48296 | 31.45 |
| 19830-001 | 8 | 138 | 24 | 08/01/10 13:39:00 | 12.54 | 7.46 | 7.53 | 48343 | 31.48 |
| 19830-014 | 8 | 139 | 24 | 08/01/10 13:39:08 | 12.52 | 7.61 | 7.55 | 48454 | 31.56 |
| 19830-000 | 8 | 140 | 24 | 08/01/10 13:39:15 | 12.58 | 7.56 | 7.52 | 48386 | 31.51 |
| 19830-009 | 8 | 141 | 24 | 08/01/10 13:39:23 | 12.63 | 7.51 | 7.54 | 48371 | 31.50 |
| 19830-008 | 8 | 142 | 24 | 08/01/10 13:39:32 | 12.68 | 7.72 | 7.58 | 48396 | 31.52 |
| 19830-015 | 8 | 143 | 24 | 08/01/10 13:39:41 | 12.74 | 7.88 | 7.61 | 48443 | 31.56 |
| 19830-016 | 8 | 144 | 24 | 08/01/10 13:39:49 | 12.83 | 7.95 | 7.58 | 48428 | 31.55 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 25 | 08/02/10 11:02:25 | 12.95 | 8.59 | 7.48 | 48664 | 31.73 |
| 19830-016 | 1 | 2 | 25 | 08/02/10 11:02:59 | 12.86 | 8.07 | 7.47 | 48616 | 31.69 |
| 19830-015 | 1 | 3 | 25 | 08/02/10 11:03:12 | 12.80 | 8.01 | 7.48 | 48660 | 31.72 |
| 19830-017 | 1 | 4 | 25 | 08/02/10 11:03:28 | 12.84 | 7.87 | 7.52 | 48645 | 31.71 |
| 19830-001 | 1 | 5 | 25 | 08/02/10 11:03:40 | 12.83 | 8.00 | 7.59 | 48672 | 31.73 |
| 19830-011 | 1 | 6 | 25 | 08/02/10 11:03:50 | 12.79 | 8.01 | 7.57 | 48660 | 31.72 |
| 19830-014 | 1 | 7 | 25 | 08/02/10 11:04:04 | 12.75 | 7.71 | 7.40 | 48647 | 31.71 |
| 19830-009 | 1 | 8 | 25 | 08/02/10 11:04:22 | 12.68 | 6.56 | 7.42 | 48660 | 31.71 |
| 19830-012 | 1 | 9 | 25 | 08/02/10 11:04:38 | 12.72 | 6.55 | 7.49 | 48661 | 31.72 |
| 19830-010 | 1 | 10 | 25 | 08/02/10 11:04:51 | 12.65 | 6.70 | 7.53 | 48639 | 31.70 |
| 19830-008 | 1 | 11 | 25 | 08/02/10 11:05:02 | 12.59 | 7.06 | 7.61 | 48613 | 31.68 |
| 19830-006 | 1 | 12 | 25 | 08/02/10 11:05:12 | 12.55 | 7.25 | 7.65 | 48619 | 31.68 |
| 19830-004 | 1 | 13 | 25 | 08/02/10 11:05:23 | 12.56 | 7.61 | 7.54 | 48665 | 31.71 |
| 19830-013 | 1 | 14 | 25 | 08/02/10 11:05:33 | 12.56 | 7.66 | 7.44 | 48662 | 31.71 |
| 19830-000 | 1 | 15 | 25 | 08/02/10 11:05:44 | 12.53 | 7.56 | 7.40 | 48651 | 31.70 |
| 19830-005 | 1 | 16 | 25 | 08/02/10 11:05:55 | 12.50 | 7.62 | 7.53 | 48705 | 31.74 |
| 19830-007 | 1 | 17 | 25 | 08/02/10 11:06:06 | 12.48 | 7.90 | 7.58 | 48778 | 31.79 |
| 19830-003 | 1 | 18 | 25 | 08/02/10 11:06:20 | 12.57 | 8.03 | 7.51 | 48772 | 31.79 |
| 19830-009 | 2 | 19 | 25 | 08/02/10 11:06:33 | 12.61 | 7.92 | 7.48 | 48804 | 31.82 |
| 19830-016 | 2 | 20 | 25 | 08/02/10 11:06:44 | 12.69 | 7.77 | 7.49 | 48664 | 31.72 |
| 19830-007 | 2 | 21 | 25 | 08/02/10 11:06:56 | 12.70 | 7.74 | 7.42 | 48447 | 31.56 |
| 19830-015 | 2 | 22 | 25 | 08/02/10 11:07:09 | 12.70 | 7.44 | 7.44 | 48607 | 31.68 |
| 19830-008 | 2 | 23 | 25 | 08/02/10 11:07:19 | 12.70 | 7.40 | 7.55 | 48615 | 31.68 |
| 19830-002 | 2 | 24 | 25 | 08/02/10 11:07:29 | 12.68 | 7.54 | 7.54 | 48569 | 31.65 |
| 19830-012 | 2 | 25 | 25 | 08/02/10 11:07:38 | 12.62 | 7.40 | 7.48 | 48571 | 31.65 |
| 19830-004 | 2 | 26 | 25 | 08/02/10 11:07:49 | 12.65 | 7.24 | 7.39 | 48590 | 31.66 |
| 19830-000 | 2 | 27 | 25 | 08/02/10 11:07:59 | 12.59 | 7.13 | 7.41 | 48561 | 31.64 |
| 19830-003 | 2 | 28 | 25 | 08/02/10 11:08:09 | 12.53 | 7.45 | 7.43 | 48329 | 31.47 |
| 19830-011 | 2 | 29 | 25 | 08/02/10 11:08:19 | 12.51 | 7.67 | 7.44 | 48592 | 31.66 |
| 19830-017 | 2 | 30 | 25 | 08/02/10 11:08:30 | 12.48 | 7.69 | 7.43 | 48612 | 31.67 |
| 19830-014 | 2 | 31 | 25 | 08/02/10 11:08:41 | 12.47 | 7.60 | 7.36 | 48606 | 31.67 |
| 19830-001 | 2 | 32 | 25 | 08/02/10 11:08:58 | 12.43 | 6.73 | 7.33 | 48551 | 31.62 |
| 19830-013 | 2 | 33 | 25 | 08/02/10 11:09:09 | 12.44 | 6.41 | 7.42 | 48704 | 31.73 |
| 19830-010 | 2 | 34 | 25 | 08/02/10 11:09:23 | 12.51 | 7.05 | 7.42 | 48634 | 31.69 |
| 19830-006 | 2 | 35 | 25 | 08/02/10 11:09:40 | 12.65 | 7.29 | 7.38 | 48688 | 31.73 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-005 | 2 | 36 | 25 | 08/02/10 11:09:51 | 12.68 | 7.16 | 7.44 | 48612 | 31.68 |
| 19830-013 | 3 | 37 | 25 | 08/02/10 11:10:03 | 12.64 | 7.22 | 7.43 | 48659 | 31.71 |
| 19830-009 | 3 | 38 | 25 | 08/02/10 11:10:12 | 12.67 | 7.11 | 7.41 | 48689 | 31.73 |
| 19830-017 | 3 | 39 | 25 | 08/02/10 11:10:21 | 12.73 | 7.09 | 7.36 | 48577 | 31.66 |
| 19830-016 | 3 | 40 | 25 | 08/02/10 11:10:31 | 12.65 | 6.63 | 7.28 | 48601 | 31.67 |
| 19830-000 | 3 | 41 | 25 | 08/02/10 11:10:40 | 12.59 | 6.54 | 7.35 | 48568 | 31.64 |
| 19830-010 | 3 | 42 | 25 | 08/02/10 11:10:52 | 12.63 | 7.01 | 7.27 | 48608 | 31.67 |
| 19830-008 | 3 | 43 | 25 | 08/02/10 11:11:16 | 12.63 | 6.02 | 7.38 | 48646 | 31.70 |
| 19830-014 | 3 | 44 | 25 | 08/02/10 11:11:27 | 12.61 | 6.43 | 7.41 | 48569 | 31.64 |
| 19830-004 | 3 | 45 | 25 | 08/02/10 11:11:38 | 12.59 | 6.73 | 7.35 | 48558 | 31.64 |
| 19830-006 | 3 | 46 | 25 | 08/02/10 11:11:47 | 12.58 | 6.66 | 7.33 | 48580 | 31.65 |
| 19830-005 | 3 | 47 | 25 | 08/02/10 11:11:57 | 12.57 | 6.81 | 7.42 | 48567 | 31.64 |
| 19830-011 | 3 | 48 | 25 | 08/02/10 11:12:13 | 12.35 | 7.37 | 7.52 | 48750 | 31.76 |
| 19830-002 | 3 | 49 | 25 | 08/02/10 11:12:23 | 12.39 | 7.64 | 7.47 | 48707 | 31.74 |
| 19830-012 | 3 | 50 | 25 | 08/02/10 11:12:34 | 12.49 | 7.46 | 7.43 | 48665 | 31.71 |
| 19830-001 | 3 | 51 | 25 | 08/02/10 11:12:47 | 12.41 | 7.30 | 7.51 | 48687 | 31.72 |
| 19830-003 | 3 | 52 | 25 | 08/02/10 11:12:58 | 12.34 | 7.55 | 7.59 | 48705 | 31.73 |
| 19830-007 | 3 | 53 | 25 | 08/02/10 11:13:07 | 12.35 | 7.78 | 7.55 | 48689 | 31.72 |
| 19830-015 | 3 | 54 | 25 | 08/02/10 11:13:18 | 12.34 | 7.86 | 7.59 | 48712 | 31.74 |
| 19830-006 | 4 | 55 | 25 | 08/02/10 11:13:31 | 12.29 | 8.04 | 7.76 | 48675 | 31.71 |
| 19830-011 | 4 | 56 | 25 | 08/02/10 11:13:41 | 12.25 | 8.22 | 7.80 | 48698 | 31.72 |
| 19830-012 | 4 | 57 | 25 | 08/02/10 11:13:51 | 12.17 | 8.23 | 7.77 | 48724 | 31.74 |
| 19830-010 | 4 | 58 | 25 | 08/02/10 11:14:00 | 12.14 | 8.23 | 7.74 | 48717 | 31.73 |
| 19830-015 | 4 | 59 | 25 | 08/02/10 11:14:09 | 12.06 | 8.31 | 7.71 | 48720 | 31.73 |
| 19830-009 | 4 | 60 | 25 | 08/02/10 11:14:17 | 12.00 | 8.30 | 7.69 | 48762 | 31.76 |
| 19830-001 | 4 | 61 | 25 | 08/02/10 11:14:28 | 12.03 | 8.22 | 7.66 | 48894 | 31.85 |
| 19830-016 | 4 | 62 | 25 | 08/02/10 11:14:37 | 12.12 | 8.03 | 7.60 | 48935 | 31.89 |
| 19830-008 | 4 | 63 | 25 | 08/02/10 11:14:46 | 12.29 | 7.84 | 7.55 | 48906 | 31.88 |
| 19830-004 | 4 | 64 | 25 | 08/02/10 11:14:56 | 12.47 | 7.74 | 7.49 | 48840 | 31.84 |
| 19830-007 | 4 | 65 | 25 | 08/02/10 11:15:12 | 12.36 | 7.49 | 7.39 | 48622 | 31.67 |
| 19830-014 | 4 | 66 | 25 | 08/02/10 11:15:22 | 12.29 | 7.52 | 7.38 | 48647 | 31.69 |
| 19830-000 | 4 | 67 | 25 | 08/02/10 11:15:34 | 12.23 | 7.29 | 7.36 | 48688 | 31.72 |
| 19830-017 | 4 | 68 | 25 | 08/02/10 11:15:45 | 12.21 | 7.19 | 7.33 | 48696 | 31.72 |
| 19830-013 | 4 | 69 | 25 | 08/02/10 11:15:53 | 12.22 | 7.11 | 7.34 | 48667 | 31.70 |
| 19830-002 | 4 | 70 | 25 | 08/02/10 11:16:02 | 12.23 | 7.23 | 7.43 | 48688 | 31.71 |
| 19830-005 | 4 | 71 | 25 | 08/02/10 11:16:12 | 12.23 | 7.47 | 7.50 | 48640 | 31.68 |
| 19830-003 | 4 | 72 | 25 | 08/02/10 11:16:22 | 12.25 | 7.64 | 7.52 | 48670 | 31.70 |
| 19830-016 | 5 | 73 | 25 | 08/02/10 11:16:31 | 12.23 | 7.77 | 7.49 | 48719 | 31.74 |
| 19830-003 | 5 | 74 | 25 | 08/02/10 11:16:41 | 12.23 | 7.72 | 7.43 | 48676 | 31.71 |
| 19830-000 | 5 | 75 | 25 | 08/02/10 11:16:51 | 12.29 | 7.49 | 7.41 | 48642 | 31.68 |
| 19830-013 | 5 | 76 | 25 | 08/02/10 11:16:59 | 12.34 | 7.42 | 7.40 | 48656 | 31.70 |
| 19830-001 | 5 | 77 | 25 | 08/02/10 11:17:19 | 12.43 | 7.52 | 7.55 | 47742 | 31.04 |
| 19830-002 | 5 | 78 | 25 | 08/02/10 11:17:27 | 12.47 | 7.57 | 7.52 | 48673 | 31.71 |
| 19830-004 | 5 | 79 | 25 | 08/02/10 11:17:35 | 12.54 | 7.54 | 7.45 | 48668 | 31.71 |
| 19830-012 | 5 | 80 | 25 | 08/02/10 11:17:47 | 12.63 | 7.45 | 7.51 | 48694 | 31.74 |
| 19830-005 | 5 | 81 | 25 | 08/02/10 11:18:00 | 12.43 | 7.77 | 7.56 | 48549 | 31.62 |
| 19830-011 | 5 | 82 | 25 | 08/02/10 11:18:10 | 12.30 | 7.77 | 7.53 | 48596 | 31.65 |
| 19830-010 | 5 | 83 | 25 | 08/02/10 11:18:19 | 12.25 | 7.67 | 7.48 | 48675 | 31.71 |
| 19830-017 | 5 | 84 | 25 | 08/02/10 11:18:27 | 12.23 | 7.69 | 7.46 | 48621 | 31.67 |
| 19830-009 | 5 | 85 | 25 | 08/02/10 11:18:38 | 12.22 | 7.45 | 7.44 | 48718 | 31.74 |
| 19830-006 | 5 | 86 | 25 | 08/02/10 11:18:46 | 12.25 | 7.21 | 7.46 | 48773 | 31.78 |
| 19830-008 | 5 | 87 | 25 | 08/02/10 11:18:54 | 12.28 | 7.17 | 7.51 | 48678 | 31.71 |
| 19830-007 | 5 | 88 | 25 | 08/02/10 11:19:02 | 12.29 | 7.36 | 7.54 | 48692 | 31.72 |
| 19830-014 | 5 | 89 | 25 | 08/02/10 11:19:14 | 12.27 | 7.64 | 7.49 | 48732 | 31.75 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-015 | 5 | 90 | 25 | 08/02/10 11:19:21 | 12.28 | 7.68 | 7.49 | 48720 | 31.74 |
| 19830-005 | 6 | 91 | 25 | 08/02/10 11:19:30 | 12.29 | 7.70 | 7.58 | 48680 | 31.71 |
| 19830-007 | 6 | 92 | 25 | 08/02/10 11:19:37 | 12.31 | 7.77 | 7.60 | 48698 | 31.73 |
| 19830-002 | 6 | 93 | 25 | 08/02/10 11:19:46 | 12.36 | 7.84 | 7.54 | 48734 | 31.75 |
| 19830-009 | 6 | 94 | 25 | 08/02/10 11:19:56 | 12.42 | 7.76 | 7.50 | 48698 | 31.73 |
| 19830-013 | 6 | 95 | 25 | 08/02/10 11:20:04 | 12.45 | 7.49 | 7.49 | 48718 | 31.75 |
| 19830-004 | 6 | 96 | 25 | 08/02/10 11:20:12 | 12.52 | 7.35 | 7.48 | 48822 | 31.82 |
| 19830-012 | 6 | 97 | 25 | 08/02/10 11:20:30 | 12.33 | 7.72 | 7.53 | 48718 | 31.74 |
| 19830-015 | 6 | 98 | 25 | 08/02/10 11:20:38 | 12.28 | 7.90 | 7.57 | 48689 | 31.72 |
| 19830-014 | 6 | 99 | 25 | 08/02/10 11:20:48 | 12.20 | 7.89 | 7.60 | 48779 | 31.78 |
| 19830-003 | 6 | 100 | 25 | 08/02/10 11:20:58 | 12.20 | 7.91 | 7.59 | 48803 | 31.80 |
| 19830-010 | 6 | 101 | 25 | 08/02/10 11:21:06 | 12.20 | 7.92 | 7.58 | 48893 | 31.86 |
| 19830-000 | 6 | 102 | 25 | 08/02/10 11:21:15 | 12.19 | 8.02 | 7.58 | 48782 | 31.78 |
| 19830-016 | 6 | 103 | 25 | 08/02/10 11:21:23 | 12.18 | 8.08 | 7.58 | 48804 | 31.80 |
| 19830-001 | 6 | 104 | 25 | 08/02/10 11:21:30 | 12.17 | 8.09 | 7.63 | 48822 | 31.81 |
| 19830-017 | 6 | 105 | 25 | 08/02/10 11:21:39 | 12.14 | 8.11 | 7.65 | 48711 | 31.73 |
| 19830-008 | 6 | 106 | 25 | 08/02/10 11:21:47 | 12.11 | 8.16 | 7.67 | 48833 | 31.81 |
| 19830-011 | 6 | 107 | 25 | 08/02/10 11:21:54 | 12.14 | 8.22 | 7.72 | 48878 | 31.85 |
| 19830-006 | 6 | 108 | 25 | 08/02/10 11:22:05 | 12.28 | 8.14 | 7.65 | 48930 | 31.89 |
| 19830-015 | 7 | 109 | 25 | 08/02/10 11:22:13 | 12.40 | 8.08 | 7.61 | 49017 | 31.96 |
| 19830-017 | 7 | 110 | 25 | 08/02/10 11:22:21 | 12.54 | 8.02 | 7.60 | 48974 | 31.93 |
| 19830-003 | 7 | 111 | 25 | 08/02/10 11:22:30 | 12.67 | 7.96 | 7.56 | 48895 | 31.88 |
| 19830-008 | 7 | 112 | 25 | 08/02/10 11:22:41 | 12.75 | 7.91 | 7.60 | 48973 | 31.94 |
| 19830-006 | 7 | 113 | 25 | 08/02/10 11:22:56 | 12.64 | 8.09 | 7.60 | 48471 | 31.57 |
| 19830-012 | 7 | 114 | 25 | 08/02/10 11:23:06 | 12.56 | 8.09 | 7.57 | 48463 | 31.57 |
| 19830-004 | 7 | 115 | 25 | 08/02/10 11:23:18 | 12.45 | 8.02 | 7.55 | 48517 | 31.60 |
| 19830-011 | 7 | 116 | 25 | 08/02/10 11:23:27 | 12.39 | 8.01 | 7.55 | 48511 | 31.59 |
| 19830-014 | 7 | 117 | 25 | 08/02/10 11:23:35 | 12.36 | 7.90 | 7.60 | 48569 | 31.63 |
| 19830-005 | 7 | 118 | 25 | 08/02/10 11:23:43 | 12.34 | 7.87 | 7.60 | 48509 | 31.59 |
| 19830-001 | 7 | 119 | 25 | 08/02/10 11:23:51 | 12.31 | 7.94 | 7.57 | 48610 | 31.66 |
| 19830-000 | 7 | 120 | 25 | 08/02/10 11:23:59 | 12.33 | 7.94 | 7.56 | 48556 | 31.62 |
| 19830-009 | 7 | 121 | 25 | 08/02/10 11:24:10 | 12.24 | 8.01 | 7.53 | 48632 | 31.67 |
| 19830-010 | 7 | 122 | 25 | 08/02/10 11:24:17 | 12.19 | 7.98 | 7.49 | 48657 | 31.69 |
| 19830-007 | 7 | 123 | 25 | 08/02/10 11:24:25 | 12.21 | 7.78 | 7.46 | 48702 | 31.72 |
| 19830-002 | 7 | 124 | 25 | 08/02/10 11:24:33 | 12.25 | 7.65 | 7.45 | 48807 | 31.80 |
| 19830-013 | 7 | 125 | 25 | 08/02/10 11:24:40 | 12.28 | 7.62 | 7.43 | 48908 | 31.88 |
| 19830-016 | 7 | 126 | 25 | 08/02/10 11:24:49 | 12.42 | 7.59 | 7.44 | 48841 | 31.83 |
| 19830-017 | 8 | 127 | 25 | 08/02/10 11:25:01 | 12.61 | 7.55 | 7.43 | 48733 | 31.76 |
| 19830-013 | 8 | 128 | 25 | 08/02/10 11:25:09 | 12.70 | 7.48 | 7.44 | 48798 | 31.81 |
| 19830-010 | 8 | 129 | 25 | 08/02/10 11:25:24 | 12.67 | 7.70 | 7.57 | 48583 | 31.66 |
| 19830-007 | 8 | 130 | 25 | 08/02/10 11:25:33 | 12.64 | 7.77 | 7.57 | 48443 | 31.55 |
| 19830-011 | 8 | 131 | 25 | 08/02/10 11:25:43 | 12.55 | 7.73 | 7.47 | 48518 | 31.60 |
| 19830-002 | 8 | 132 | 25 | 08/02/10 11:25:52 | 12.46 | 7.27 | 7.40 | 48584 | 31.65 |
| 19830-004 | 8 | 133 | 25 | 08/02/10 11:26:02 | 12.44 | 6.69 | 7.39 | 48576 | 31.64 |
| 19830-003 | 8 | 134 | 25 | 08/02/10 11:26:10 | 12.44 | 6.72 | 7.42 | 48532 | 31.61 |
| 19830-005 | 8 | 135 | 25 | 08/02/10 11:26:20 | 12.40 | 7.07 | 7.40 | 48547 | 31.62 |
| 19830-012 | 8 | 136 | 25 | 08/02/10 11:26:29 | 12.36 | 7.04 | 7.40 | 48591 | 31.65 |
| 19830-006 | 8 | 137 | 25 | 08/02/10 11:26:37 | 12.30 | 7.00 | 7.44 | 48738 | 31.75 |
| 19830-001 | 8 | 138 | 25 | 08/02/10 11:26:44 | 12.29 | 7.10 | 7.50 | 48746 | 31.76 |
| 19830-014 | 8 | 139 | 25 | 08/02/10 11:26:52 | 12.30 | 7.27 | 7.49 | 48731 | 31.75 |
| 19830-000 | 8 | 140 | 25 | 08/02/10 11:27:01 | 12.36 | 7.19 | 7.45 | 48699 | 31.73 |
| 19830-009 | 8 | 141 | 25 | 08/02/10 11:27:09 | 12.41 | 7.22 | 7.49 | 48758 | 31.77 |
| 19830-008 | 8 | 142 | 25 | 08/02/10 11:27:18 | 12.46 | 7.48 | 7.56 | 48814 | 31.82 |
| 19830-015 | 8 | 143 | 25 | 08/02/10 11:27:27 | 12.55 | 7.67 | 7.60 | 48804 | 31.81 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-016 | 8 | 144 | 25 | 08/02/10 11:27:38 | 12.71 | 7.72 | 7.56 | 48797 | 31.81 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 26 | 08/03/10 11:02:10 | 13.25 | 7.92 | 7.54 | 48340 | 31.50 |
| 19830-016 | 1 | 2 | 26 | 08/03/10 11:03:03 | 13.21 | 7.85 | 7.57 | 48225 | 31.42 |
| 19830-015 | 1 | 3 | 26 | 08/03/10 11:03:18 | 13.16 | 7.93 | 7.61 | 48319 | 31.48 |
| 19830-017 | 1 | 4 | 26 | 08/03/10 11:03:29 | 13.18 | 7.80 | 7.61 | 48324 | 31.49 |
| 19830-001 | 1 | 5 | 26 | 08/03/10 11:03:42 | 13.12 | 7.87 | 7.68 | 48293 | 31.46 |
| 19830-011 | 1 | 6 | 26 | 08/03/10 11:03:55 | 13.10 | 7.92 | 7.66 | 48339 | 31.50 |
| 19830-014 | 1 | 7 | 26 | 08/03/10 11:04:09 | 13.11 | 7.78 | 7.56 | 48353 | 31.51 |
| 19830-009 | 1 | 8 | 26 | 08/03/10 11:04:24 | 13.05 | 7.15 | 7.55 | 48285 | 31.46 |
| 19830-012 | 1 | 9 | 26 | 08/03/10 11:04:36 | 13.03 | 7.01 | 7.60 | 48359 | 31.51 |
| 19830-010 | 1 | 10 | 26 | 08/03/10 11:04:45 | 13.02 | 7.07 | 7.64 | 48321 | 31.48 |
| 19830-008 | 1 | 11 | 26 | 08/03/10 11:04:58 | 13.00 | 7.57 | 7.67 | 48335 | 31.49 |
| 19830-006 | 1 | 12 | 26 | 08/03/10 11:05:07 | 13.01 | 7.62 | 7.67 | 48315 | 31.48 |
| 19830-004 | 1 | 13 | 26 | 08/03/10 11:05:18 | 12.94 | 7.83 | 7.61 | 48312 | 31.47 |
| 19830-013 | 1 | 14 | 26 | 08/03/10 11:05:27 | 12.91 | 7.90 | 7.56 | 48328 | 31.48 |
| 19830-000 | 1 | 15 | 26 | 08/03/10 11:05:38 | 12.88 | 7.86 | 7.56 | 48330 | 31.48 |
| 19830-005 | 1 | 16 | 26 | 08/03/10 11:05:47 | 12.81 | 7.88 | 7.62 | 48318 | 31.47 |
| 19830-007 | 1 | 17 | 26 | 08/03/10 11:05:59 | 12.76 | 8.12 | 7.66 | 48347 | 31.49 |
| 19830-003 | 1 | 18 | 26 | 08/03/10 11:06:07 | 12.76 | 8.27 | 7.64 | 48412 | 31.54 |
| 19830-009 | 2 | 19 | 26 | 08/03/10 11:06:24 | 13.00 | 8.21 | 7.62 | 48437 | 31.56 |
| 19830-016 | 2 | 20 | 26 | 08/03/10 11:06:40 | 13.12 | 7.86 | 7.60 | 48341 | 31.50 |
| 19830-007 | 2 | 21 | 26 | 08/03/10 11:06:55 | 13.17 | 7.76 | 7.52 | 48291 | 31.46 |
| 19830-015 | 2 | 22 | 26 | 08/03/10 11:07:03 | 13.17 | 7.62 | 7.51 | 48396 | 31.54 |
| 19830-008 | 2 | 23 | 26 | 08/03/10 11:07:15 | 13.23 | 7.55 | 7.62 | 48292 | 31.47 |
| 19830-002 | 2 | 24 | 26 | 08/03/10 11:07:28 | 13.27 | 7.73 | 7.60 | 48298 | 31.47 |
| 19830-012 | 2 | 25 | 26 | 08/03/10 11:07:38 | 13.24 | 7.59 | 7.57 | 48233 | 31.43 |
| 19830-004 | 2 | 26 | 26 | 08/03/10 11:07:51 | 13.17 | 7.63 | 7.51 | 48246 | 31.43 |
| 19830-000 | 2 | 27 | 26 | 08/03/10 11:08:04 | 13.06 | 7.47 | 7.50 | 48260 | 31.44 |
| 19830-003 | 2 | 28 | 26 | 08/03/10 11:08:15 | 13.05 | 7.81 | 7.53 | 48208 | 31.40 |
| 19830-011 | 2 | 29 | 26 | 08/03/10 11:08:25 | 13.04 | 7.92 | 7.52 | 48287 | 31.46 |
| 19830-017 | 2 | 30 | 26 | 08/03/10 11:08:33 | 13.03 | 7.90 | 7.50 | 48300 | 31.47 |
| 19830-014 | 2 | 31 | 26 | 08/03/10 11:08:42 | 13.02 | 7.88 | 7.47 | 48298 | 31.46 |
| 19830-001 | 2 | 32 | 26 | 08/03/10 11:08:58 | 12.95 | 7.27 | 7.52 | 48297 | 31.46 |
| 19830-013 | 2 | 33 | 26 | 08/03/10 11:09:09 | 12.93 | 7.05 | 7.56 | 48324 | 31.48 |
| 19830-010 | 2 | 34 | 26 | 08/03/10 11:09:22 | 12.95 | 7.51 | 7.54 | 48314 | 31.47 |
| 19830-006 | 2 | 35 | 26 | 08/03/10 11:09:38 | 13.01 | 7.65 | 7.47 | 48404 | 31.54 |
| 19830-005 | 2 | 36 | 26 | 08/03/10 11:09:52 | 13.13 | 7.47 | 7.53 | 48346 | 31.50 |
| 19830-013 | 3 | 37 | 26 | 08/03/10 11:10:01 | 13.13 | 7.51 | 7.53 | 48309 | 31.48 |
| 19830-009 | 3 | 38 | 26 | 08/03/10 11:10:10 | 13.15 | 7.44 | 7.52 | 48359 | 31.51 |
| 19830-017 | 3 | 39 | 26 | 08/03/10 11:10:22 | 13.21 | 7.52 | 7.47 | 48325 | 31.49 |
| 19830-016 | 3 | 40 | 26 | 08/03/10 11:10:31 | 13.09 | 7.23 | 7.43 | 47953 | 31.22 |
| 19830-000 | 3 | 41 | 26 | 08/03/10 11:10:40 | 13.07 | 7.14 | 7.48 | 48352 | 31.50 |
| 19830-010 | 3 | 42 | 26 | 08/03/10 11:10:52 | 13.15 | 7.47 | 7.44 | 48304 | 31.47 |
| 19830-008 | 3 | 43 | 26 | 08/03/10 11:11:08 | 13.01 | 6.95 | 7.47 | 48312 | 31.47 |
| 19830-014 | 3 | 44 | 26 | 08/03/10 11:11:21 | 13.09 | 7.13 | 7.53 | 48338 | 31.50 |
| 19830-004 | 3 | 45 | 26 | 08/03/10 11:11:30 | 13.12 | 7.22 | 7.52 | 48302 | 31.47 |
| 19830-006 | 3 | 46 | 26 | 08/03/10 11:11:43 | 13.09 | 7.27 | 7.53 | 48267 | 31.44 |
| 19830-005 | 3 | 47 | 26 | 08/03/10 11:11:55 | 13.09 | 7.54 | 7.54 | 48261 | 31.44 |
| 19830-011 | 3 | 48 | 26 | 08/03/10 11:12:05 | 12.91 | 7.71 | 7.57 | 48178 | 31.37 |
| 19830-002 | 3 | 49 | 26 | 08/03/10 11:12:17 | 12.94 | 7.88 | 7.55 | 48393 | 31.53 |
| 19830-012 | 3 | 50 | 26 | 08/03/10 11:12:28 | 12.98 | 7.71 | 7.56 | 48279 | 31.45 |
| 19830-001 | 3 | 51 | 26 | 08/03/10 11:12:42 | 12.68 | 7.93 | 7.63 | 48248 | 31.41 |
| 19830-003 | 3 | 52 | 26 | 08/03/10 11:12:53 | 12.61 | 8.06 | 7.64 | 48396 | 31.52 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-007 | 3 | 53 | 26 | 08/03/10 11:13:04 | 12.65 | 8.18 | 7.62 | 48424 | 31.54 |
| 19830-015 | 3 | 54 | 26 | 08/03/10 11:13:13 | 12.67 | 8.15 | 7.61 | 48421 | 31.54 |
| 19830-006 | 4 | 55 | 26 | 08/03/10 11:13:27 | 12.64 | 8.25 | 7.75 | 48315 | 31.46 |
| 19830-011 | 4 | 56 | 26 | 08/03/10 11:14:12 | 12.59 | 8.13 | 7.76 | 48390 | 31.51 |
| 19830-012 | 4 | 57 | 26 | 08/03/10 11:14:19 | 12.58 | 8.02 | 7.75 | 48356 | 31.49 |
| 19830-010 | 4 | 58 | 26 | 08/03/10 11:14:29 | 12.50 | 8.11 | 7.74 | 48305 | 31.45 |
| 19830-015 | 4 | 59 | 26 | 08/03/10 11:14:43 | 12.31 | 8.37 | 7.72 | 48345 | 31.47 |
| 19830-009 | 4 | 60 | 26 | 08/03/10 11:14:52 | 12.28 | 8.32 | 7.72 | 48422 | 31.52 |
| 19830-001 | 4 | 61 | 26 | 08/03/10 11:15:04 | 12.32 | 8.27 | 7.71 | 48471 | 31.56 |
| 19830-016 | 4 | 62 | 26 | 08/03/10 11:15:15 | 12.48 | 8.13 | 7.65 | 48340 | 31.47 |
| 19830-008 | 4 | 63 | 26 | 08/03/10 11:15:24 | 12.62 | 8.06 | 7.63 | 48570 | 31.65 |
| 19830-004 | 4 | 64 | 26 | 08/03/10 11:15:38 | 12.81 | 7.91 | 7.56 | 48431 | 31.55 |
| 19830-007 | 4 | 65 | 26 | 08/03/10 11:15:49 | 12.68 | 7.68 | 7.52 | 48205 | 31.38 |
| 19830-014 | 4 | 66 | 26 | 08/03/10 11:15:57 | 12.64 | 7.75 | 7.53 | 48391 | 31.52 |
| 19830-000 | 4 | 67 | 26 | 08/03/10 11:16:09 | 12.65 | 7.67 | 7.53 | 48380 | 31.51 |
| 19830-017 | 4 | 68 | 26 | 08/03/10 11:16:18 | 12.68 | 7.69 | 7.52 | 48377 | 31.51 |
| 19830-013 | 4 | 69 | 26 | 08/03/10 11:16:30 | 12.74 | 7.65 | 7.53 | 48363 | 31.50 |
| 19830-002 | 4 | 70 | 26 | 08/03/10 11:16:36 | 12.75 | 7.72 | 7.57 | 48356 | 31.50 |
| 19830-005 | 4 | 71 | 26 | 08/03/10 11:16:44 | 12.75 | 7.82 | 7.60 | 48318 | 31.47 |
| 19830-003 | 4 | 72 | 26 | 08/03/10 11:16:54 | 12.66 | 7.97 | 7.60 | 48290 | 31.44 |
| 19830-016 | 5 | 73 | 26 | 08/03/10 11:17:03 | 12.63 | 8.11 | 7.57 | 48366 | 31.50 |
| 19830-003 | 5 | 74 | 26 | 08/03/10 11:17:13 | 12.69 | 7.95 | 7.50 | 48244 | 31.41 |
| 19830-000 | 5 | 75 | 26 | 08/03/10 11:17:23 | 12.80 | 7.73 | 7.49 | 48404 | 31.53 |
| 19830-013 | 5 | 76 | 26 | 08/03/10 11:17:33 | 12.89 | 7.71 | 7.52 | 48370 | 31.51 |
| 19830-001 | 5 | 77 | 26 | 08/03/10 11:17:43 | 12.94 | 7.73 | 7.55 | 47342 | 30.77 |
| 19830-002 | 5 | 78 | 26 | 08/03/10 11:17:55 | 13.00 | 7.80 | 7.54 | 48379 | 31.52 |
| 19830-004 | 5 | 79 | 26 | 08/03/10 11:18:05 | 13.03 | 7.69 | 7.52 | 48312 | 31.47 |
| 19830-012 | 5 | 80 | 26 | 08/03/10 11:18:13 | 13.02 | 7.67 | 7.55 | 48304 | 31.47 |
| 19830-005 | 5 | 81 | 26 | 08/03/10 11:18:26 | 12.75 | 7.98 | 7.62 | 48173 | 31.36 |
| 19830-011 | 5 | 82 | 26 | 08/03/10 11:18:34 | 12.69 | 7.99 | 7.60 | 48350 | 31.49 |
| 19830-010 | 5 | 83 | 26 | 08/03/10 11:18:43 | 12.65 | 7.92 | 7.59 | 48389 | 31.52 |
| 19830-017 | 5 | 84 | 26 | 08/03/10 11:18:53 | 12.72 | 7.93 | 7.55 | 48401 | 31.53 |
| 19830-009 | 5 | 85 | 26 | 08/03/10 11:19:01 | 12.74 | 7.76 | 7.50 | 48330 | 31.48 |
| 19830-006 | 5 | 86 | 26 | 08/03/10 11:19:13 | 12.70 | 7.33 | 7.48 | 48314 | 31.46 |
| 19830-008 | 5 | 87 | 26 | 08/03/10 11:19:22 | 12.74 | 7.41 | 7.55 | 48409 | 31.53 |
| 19830-007 | 5 | 88 | 26 | 08/03/10 11:19:33 | 12.71 | 7.75 | 7.57 | 48295 | 31.45 |
| 19830-014 | 5 | 89 | 26 | 08/03/10 11:19:43 | 12.62 | 7.90 | 7.56 | 48327 | 31.47 |
| 19830-015 | 5 | 90 | 26 | 08/03/10 11:19:50 | 12.62 | 7.97 | 7.59 | 48405 | 31.53 |
| 19830-005 | 6 | 91 | 26 | 08/03/10 11:19:56 | 12.67 | 8.01 | 7.62 | 48441 | 31.55 |
| 19830-007 | 6 | 92 | 26 | 08/03/10 11:20:03 | 12.72 | 8.05 | 7.65 | 48386 | 31.52 |
| 19830-002 | 6 | 93 | 26 | 08/03/10 11:20:09 | 12.77 | 8.08 | 7.62 | 48427 | 31.55 |
| 19830-009 | 6 | 94 | 26 | 08/03/10 11:20:16 | 12.83 | 8.08 | 7.60 | 48397 | 31.53 |
| 19830-013 | 6 | 95 | 26 | 08/03/10 11:20:25 | 12.88 | 7.89 | 7.55 | 48368 | 31.51 |
| 19830-004 | 6 | 96 | 26 | 08/03/10 11:20:34 | 12.89 | 7.79 | 7.54 | 48364 | 31.51 |
| 19830-012 | 6 | 97 | 26 | 08/03/10 11:20:47 | 12.66 | 7.91 | 7.57 | 48284 | 31.44 |
| 19830-015 | 6 | 98 | 26 | 08/03/10 11:20:56 | 12.56 | 8.11 | 7.60 | 48298 | 31.45 |
| 19830-014 | 6 | 99 | 26 | 08/03/10 11:21:06 | 12.47 | 8.13 | 7.63 | 48399 | 31.52 |
| 19830-003 | 6 | 100 | 26 | 08/03/10 11:21:18 | 12.45 | 8.15 | 7.64 | 48392 | 31.51 |
| 19830-010 | 6 | 101 | 26 | 08/03/10 11:21:26 | 12.40 | 8.22 | 7.63 | 48492 | 31.58 |
| 19830-000 | 6 | 102 | 26 | 08/03/10 11:21:35 | 12.43 | 8.31 | 7.65 | 48444 | 31.55 |
| 19830-016 | 6 | 103 | 26 | 08/03/10 11:21:46 | 12.43 | 8.38 | 7.64 | 48417 | 31.53 |
| 19830-001 | 6 | 104 | 26 | 08/03/10 11:21:54 | 12.40 | 8.36 | 7.67 | 48354 | 31.48 |
| 19830-017 | 6 | 105 | 26 | 08/03/10 11:22:03 | 12.30 | 8.38 | 7.68 | 48306 | 31.44 |
| 19830-008 | 6 | 106 | 26 | 08/03/10 11:22:10 | 12.25 | 8.41 | 7.68 | 48412 | 31.52 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-011 | 6 | 107 | 26 | 08/03/10 11:22:18 | 12.27 | 8.45 | 7.71 | 48540 | 31.61 |
| 19830-006 | 6 | 108 | 26 | 08/03/10 11:22:26 | 12.40 | 8.42 | 7.69 | 48607 | 31.66 |
| 19830-015 | 7 | 109 | 26 | 08/03/10 11:22:33 | 12.52 | 8.37 | 7.67 | 48681 | 31.72 |
| 19830-017 | 7 | 110 | 26 | 08/03/10 11:22:40 | 12.67 | 8.33 | 7.66 | 48642 | 31.70 |
| 19830-003 | 7 | 111 | 26 | 08/03/10 11:22:47 | 12.83 | 8.26 | 7.63 | 48540 | 31.63 |
| 19830-008 | 7 | 112 | 26 | 08/03/10 11:22:55 | 12.89 | 8.23 | 7.64 | 48559 | 31.65 |
| 19830-006 | 7 | 113 | 26 | 08/03/10 11:23:07 | 12.92 | 8.31 | 7.68 | 48093 | 31.31 |
| 19830-012 | 7 | 114 | 26 | 08/03/10 11:23:15 | 13.02 | 8.30 | 7.63 | 48366 | 31.51 |
| 19830-004 | 7 | 115 | 26 | 08/03/10 11:23:23 | 13.05 | 8.24 | 7.63 | 48285 | 31.46 |
| 19830-011 | 7 | 116 | 26 | 08/03/10 11:23:30 | 13.05 | 8.20 | 7.64 | 48300 | 31.47 |
| 19830-014 | 7 | 117 | 26 | 08/03/10 11:23:37 | 13.04 | 8.12 | 7.66 | 48240 | 31.42 |
| 19830-005 | 7 | 118 | 26 | 08/03/10 11:23:46 | 13.00 | 8.08 | 7.66 | 48230 | 31.41 |
| 19830-001 | 7 | 119 | 26 | 08/03/10 11:23:55 | 12.93 | 8.11 | 7.62 | 48174 | 31.37 |
| 19830-000 | 7 | 120 | 26 | 08/03/10 11:24:03 | 12.86 | 8.08 | 7.57 | 48217 | 31.40 |
| 19830-009 | 7 | 121 | 26 | 08/03/10 11:24:14 | 12.65 | 8.17 | 7.58 | 48206 | 31.38 |
| 19830-010 | 7 | 122 | 26 | 08/03/10 11:24:23 | 12.59 | 8.16 | 7.57 | 48380 | 31.51 |
| 19830-007 | 7 | 123 | 26 | 08/03/10 11:24:32 | 12.61 | 8.01 | 7.56 | 48347 | 31.48 |
| 19830-002 | 7 | 124 | 26 | 08/03/10 11:24:42 | 12.62 | 7.93 | 7.53 | 48432 | 31.55 |
| 19830-013 | 7 | 125 | 26 | 08/03/10 11:24:52 | 12.66 | 7.85 | 7.55 | 48456 | 31.57 |
| 19830-016 | 7 | 126 | 26 | 08/03/10 11:25:03 | 12.81 | 7.92 | 7.54 | 48475 | 31.58 |
| 19830-017 | 8 | 127 | 26 | 08/03/10 11:25:11 | 12.93 | 7.89 | 7.53 | 48455 | 31.57 |
| 19830-013 | 8 | 128 | 26 | 08/03/10 11:25:20 | 13.03 | 7.85 | 7.55 | 48402 | 31.54 |
| 19830-010 | 8 | 129 | 26 | 08/03/10 11:25:31 | 13.00 | 8.00 | 7.59 | 48425 | 31.56 |
| 19830-007 | 8 | 130 | 26 | 08/03/10 11:25:39 | 13.08 | 8.09 | 7.60 | 48175 | 31.38 |
| 19830-011 | 8 | 131 | 26 | 08/03/10 11:25:48 | 13.05 | 8.01 | 7.54 | 48239 | 31.42 |
| 19830-002 | 8 | 132 | 26 | 08/03/10 11:25:59 | 12.94 | 7.43 | 7.50 | 48264 | 31.44 |
| 19830-004 | 8 | 133 | 26 | 08/03/10 11:26:08 | 12.98 | 7.04 | 7.49 | 48399 | 31.54 |
| 19830-003 | 8 | 134 | 26 | 08/03/10 11:26:19 | 13.00 | 7.13 | 7.52 | 48318 | 31.48 |
| 19830-005 | 8 | 135 | 26 | 08/03/10 11:26:28 | 12.94 | 7.48 | 7.50 | 48220 | 31.40 |
| 19830-012 | 8 | 136 | 26 | 08/03/10 11:26:38 | 12.82 | 7.42 | 7.51 | 48184 | 31.37 |
| 19830-006 | 8 | 137 | 26 | 08/03/10 11:26:47 | 12.67 | 7.55 | 7.57 | 48302 | 31.45 |
| 19830-001 | 8 | 138 | 26 | 08/03/10 11:26:55 | 12.65 | 7.64 | 7.58 | 48394 | 31.52 |
| 19830-014 | 8 | 139 | 26 | 08/03/10 11:27:04 | 12.70 | 7.74 | 7.57 | 48420 | 31.54 |
| 19830-000 | 8 | 140 | 26 | 08/03/10 11:27:14 | 12.77 | 7.51 | 7.54 | 48367 | 31.50 |
| 19830-009 | 8 | 141 | 26 | 08/03/10 11:27:24 | 12.80 | 7.60 | 7.56 | 48375 | 31.51 |
| 19830-008 | 8 | 142 | 26 | 08/03/10 11:27:32 | 12.81 | 7.82 | 7.60 | 48410 | 31.54 |
| 19830-015 | 8 | 143 | 26 | 08/03/10 11:27:42 | 12.87 | 7.97 | 7.65 | 48444 | 31.56 |
| 19830-016 | 8 | 144 | 26 | 08/03/10 11:27:51 | 12.96 | 7.99 | 7.64 | 48442 | 31.57 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 27 | 08/04/10 08:17:05 | 12.94 | 8.56 | 7.47 | 49304 | 32.19 |
| 19830-016 | 1 | 2 | 27 | 08/04/10 08:17:40 | 12.86 | 8.34 | 7.49 | 47492 | 30.87 |
| 19830-015 | 1 | 3 | 27 | 08/04/10 08:17:56 | 12.78 | 8.45 | 7.51 | 49306 | 32.19 |
| 19830-017 | 1 | 4 | 27 | 08/04/10 08:18:08 | 12.79 | 8.30 | 7.53 | 49313 | 32.19 |
| 19830-001 | 1 | 5 | 27 | 08/04/10 08:18:20 | 12.81 | 8.21 | 7.64 | 49360 | 32.23 |
| 19830-011 | 1 | 6 | 27 | 08/04/10 08:18:30 | 12.81 | 8.23 | 7.64 | 49215 | 32.12 |
| 19830-014 | 1 | 7 | 27 | 08/04/10 08:18:38 | 12.78 | 8.24 | 7.53 | 49268 | 32.16 |
| 19830-009 | 1 | 8 | 27 | 08/04/10 08:18:47 | 12.71 | 7.86 | 7.47 | 49305 | 32.18 |
| 19830-012 | 1 | 9 | 27 | 08/04/10 08:18:58 | 12.71 | 7.38 | 7.51 | 49388 | 32.24 |
| 19830-010 | 1 | 10 | 27 | 08/04/10 08:19:11 | 12.65 | 7.34 | 7.56 | 49297 | 32.17 |
| 19830-008 | 1 | 11 | 27 | 08/04/10 08:19:24 | 12.55 | 7.69 | 7.62 | 49316 | 32.18 |
| 19830-006 | 1 | 12 | 27 | 08/04/10 08:19:33 | 12.53 | 7.76 | 7.65 | 49310 | 32.18 |
| 19830-004 | 1 | 13 | 27 | 08/04/10 08:19:45 | 12.52 | 8.08 | 7.56 | 49340 | 32.20 |
| 19830-013 | 1 | 14 | 27 | 08/04/10 08:19:54 | 12.53 | 8.17 | 7.47 | 49313 | 32.18 |
| 19830-000 | 1 | 15 | 27 | 08/04/10 08:20:05 | 12.49 | 8.15 | 7.45 | 49313 | 32.18 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-005 | 1 | 16 | 27 | 08/04/10 08:20:14 | 12.47 | 8.18 | 7.56 | 49380 | 32.23 |
| 19830-007 | 1 | 17 | 27 | 08/04/10 08:20:24 | 12.45 | 8.36 | 7.61 | 49432 | 32.26 |
| 19830-003 | 1 | 18 | 27 | 08/04/10 08:20:33 | 12.48 | 8.52 | 7.56 | 49534 | 32.34 |
| 19830-009 | 2 | 19 | 27 | 08/04/10 08:20:59 | 12.70 | 8.25 | 7.55 | 49358 | 32.22 |
| 19830-016 | 2 | 20 | 27 | 08/04/10 08:21:07 | 12.71 | 8.11 | 7.53 | 49296 | 32.18 |
| 19830-007 | 2 | 21 | 27 | 08/04/10 08:21:15 | 12.72 | 8.04 | 7.49 | 49283 | 32.17 |
| 19830-015 | 2 | 22 | 27 | 08/04/10 08:21:22 | 12.73 | 7.96 | 7.46 | 49280 | 32.17 |
| 19830-008 | 2 | 23 | 27 | 08/04/10 08:21:33 | 12.74 | 7.86 | 7.58 | 49225 | 32.13 |
| 19830-002 | 2 | 24 | 27 | 08/04/10 08:21:41 | 12.73 | 7.97 | 7.60 | 49232 | 32.13 |
| 19830-012 | 2 | 25 | 27 | 08/04/10 08:21:51 | 12.69 | 8.00 | 7.53 | 49159 | 32.08 |
| 19830-004 | 2 | 26 | 27 | 08/04/10 08:22:01 | 12.68 | 7.98 | 7.46 | 49251 | 32.14 |
| 19830-000 | 2 | 27 | 27 | 08/04/10 08:22:12 | 12.62 | 7.79 | 7.43 | 49149 | 32.07 |
| 19830-003 | 2 | 28 | 27 | 08/04/10 08:22:22 | 12.54 | 7.98 | 7.47 | 48848 | 31.84 |
| 19830-011 | 2 | 29 | 27 | 08/04/10 08:22:30 | 12.52 | 8.16 | 7.49 | 49287 | 32.16 |
| 19830-017 | 2 | 30 | 27 | 08/04/10 08:22:37 | 12.52 | 8.21 | 7.45 | 49227 | 32.12 |
| 19830-014 | 2 | 31 | 27 | 08/04/10 08:22:43 | 12.50 | 8.20 | 7.41 | 49218 | 32.11 |
| 19830-001 | 2 | 32 | 27 | 08/04/10 08:22:51 | 12.45 | 8.03 | 7.38 | 49275 | 32.15 |
| 19830-013 | 2 | 33 | 27 | 08/04/10 08:23:02 | 12.44 | 7.49 | 7.42 | 49362 | 32.21 |
| 19830-010 | 2 | 34 | 27 | 08/04/10 08:23:11 | 12.48 | 7.62 | 7.45 | 49346 | 32.20 |
| 19830-006 | 2 | 35 | 27 | 08/04/10 08:23:27 | 12.57 | 8.09 | 7.41 | 49469 | 32.30 |
| 19830-005 | 2 | 36 | 27 | 08/04/10 08:23:37 | 12.62 | 7.98 | 7.43 | 49370 | 32.23 |
| 19830-013 | 3 | 37 | 27 | 08/04/10 08:23:47 | 12.60 | 7.83 | 7.44 | 49357 | 32.22 |
| 19830-009 | 3 | 38 | 27 | 08/04/10 08:23:58 | 12.66 | 7.60 | 7.44 | 49339 | 32.20 |
| 19830-017 | 3 | 39 | 27 | 08/04/10 08:24:15 | 12.73 | 7.27 | 7.28 | 49237 | 32.13 |
| 19830-016 | 3 | 40 | 27 | 08/04/10 08:24:31 | 12.62 | 6.27 | 7.25 | 49313 | 32.18 |
| 19830-000 | 3 | 41 | 27 | 08/04/10 08:24:45 | 12.57 | 6.83 | 7.43 | 49275 | 32.15 |
| 19830-010 | 3 | 42 | 27 | 08/04/10 08:24:55 | 12.59 | 7.66 | 7.42 | 49341 | 32.20 |
| 19830-008 | 3 | 43 | 27 | 08/04/10 08:25:08 | 12.59 | 7.60 | 7.37 | 49297 | 32.17 |
| 19830-014 | 3 | 44 | 27 | 08/04/10 08:25:19 | 12.59 | 7.39 | 7.40 | 49243 | 32.13 |
| 19830-004 | 3 | 45 | 27 | 08/04/10 08:25:30 | 12.57 | 7.35 | 7.35 | 49163 | 32.07 |
| 19830-006 | 3 | 46 | 27 | 08/04/10 08:25:40 | 12.56 | 7.32 | 7.35 | 49255 | 32.14 |
| 19830-005 | 3 | 47 | 27 | 08/04/10 08:25:50 | 12.56 | 7.51 | 7.43 | 49259 | 32.14 |
| 19830-011 | 3 | 48 | 27 | 08/04/10 08:25:58 | 12.45 | 7.74 | 7.48 | 49297 | 32.17 |
| 19830-002 | 3 | 49 | 27 | 08/04/10 08:26:06 | 12.40 | 7.92 | 7.48 | 49320 | 32.18 |
| 19830-012 | 3 | 50 | 27 | 08/04/10 08:26:13 | 12.46 | 7.95 | 7.43 | 49303 | 32.17 |
| 19830-001 | 3 | 51 | 27 | 08/04/10 08:27:39 | 12.85 | 8.41 | 7.65 | 48820 | 31.84 |
| 19830-003 | 3 | 52 | 27 | 08/04/10 08:27:51 | 12.42 | 8.46 | 7.67 | 49243 | 32.13 |
| 19830-007 | 3 | 53 | 27 | 08/04/10 08:28:00 | 12.34 | 8.59 | 7.61 | 49322 | 32.18 |
| 19830-015 | 3 | 54 | 27 | 08/04/10 08:28:09 | 12.31 | 8.61 | 7.62 | 49386 | 32.22 |
| 19830-006 | 4 | 55 | 27 | 08/04/10 08:28:18 | 12.28 | 8.62 | 7.74 | 49318 | 32.17 |
| 19830-011 | 4 | 56 | 27 | 08/04/10 08:28:27 | 12.19 | 8.75 | 7.78 | 49381 | 32.22 |
| 19830-012 | 4 | 57 | 27 | 08/04/10 08:28:35 | 12.11 | 8.80 | 7.75 | 49402 | 32.23 |
| 19830-010 | 4 | 58 | 27 | 08/04/10 08:28:45 | 12.06 | 8.80 | 7.75 | 49443 | 32.25 |
| 19830-015 | 4 | 59 | 27 | 08/04/10 08:28:53 | 12.02 | 8.81 | 7.73 | 49367 | 32.20 |
| 19830-009 | 4 | 60 | 27 | 08/04/10 08:29:01 | 11.95 | 8.78 | 7.71 | 49373 | 32.20 |
| 19830-001 | 4 | 61 | 27 | 08/04/10 08:29:09 | 11.95 | 8.73 | 7.70 | 49599 | 32.36 |
| 19830-016 | 4 | 62 | 27 | 08/04/10 08:29:17 | 12.03 | 8.65 | 7.65 | 49582 | 32.35 |
| 19830-008 | 4 | 63 | 27 | 08/04/10 08:29:29 | 12.25 | 8.45 | 7.60 | 49516 | 32.32 |
| 19830-004 | 4 | 64 | 27 | 08/04/10 08:29:40 | 12.42 | 8.34 | 7.52 | 49485 | 32.30 |
| 19830-007 | 4 | 65 | 27 | 08/04/10 08:29:54 | 12.30 | 8.10 | 7.45 | 49364 | 32.21 |
| 19830-014 | 4 | 66 | 27 | 08/04/10 08:30:12 | 12.22 | 8.06 | 7.45 | 49335 | 32.18 |
| 19830-000 | 4 | 67 | 27 | 08/04/10 08:30:20 | 12.20 | 7.93 | 7.45 | 49295 | 32.15 |
| 19830-017 | 4 | 68 | 27 | 08/04/10 08:30:28 | 12.18 | 7.93 | 7.43 | 49329 | 32.18 |
| 19830-013 | 4 | 69 | 27 | 08/04/10 08:30:35 | 12.17 | 7.92 | 7.41 | 49339 | 32.18 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-002 | 4 | 70 | 27 | 08/04/10 08:30:42 | 12.17 | 7.91 | 7.46 | 49369 | 32.21 |
| 19830-005 | 4 | 71 | 27 | 08/04/10 08:30:47 | 12.17 | 7.98 | 7.49 | 49333 | 32.18 |
| 19830-003 | 4 | 72 | 27 | 08/04/10 08:30:52 | 12.18 | 8.08 | 7.54 | 49386 | 32.22 |
| 19830-016 | 5 | 73 | 27 | 08/04/10 08:31:00 | 12.19 | 8.20 | 7.54 | 49332 | 32.18 |
| 19830-003 | 5 | 74 | 27 | 08/04/10 08:31:08 | 12.19 | 8.28 | 7.47 | 49315 | 32.17 |
| 19830-000 | 5 | 75 | 27 | 08/04/10 08:31:17 | 12.22 | 8.16 | 7.45 | 49313 | 32.17 |
| 19830-013 | 5 | 76 | 27 | 08/04/10 08:31:26 | 12.28 | 8.12 | 7.44 | 49327 | 32.18 |
| 19830-001 | 5 | 77 | 27 | 08/04/10 08:31:36 | 12.34 | 8.14 | 7.52 | 48160 | 31.34 |
| 19830-002 | 5 | 78 | 27 | 08/04/10 08:31:47 | 12.42 | 8.13 | 7.51 | 49168 | 32.07 |
| 19830-004 | 5 | 79 | 27 | 08/04/10 08:31:54 | 12.48 | 8.08 | 7.47 | 49348 | 32.20 |
| 19830-012 | 5 | 80 | 27 | 08/04/10 08:32:03 | 12.55 | 8.02 | 7.52 | 49413 | 32.25 |
| 19830-005 | 5 | 81 | 27 | 08/04/10 08:32:15 | 12.40 | 8.30 | 7.57 | 49231 | 32.12 |
| 19830-011 | 5 | 82 | 27 | 08/04/10 08:32:24 | 12.25 | 8.37 | 7.54 | 49291 | 32.15 |
| 19830-010 | 5 | 83 | 27 | 08/04/10 08:32:34 | 12.18 | 8.25 | 7.53 | 49362 | 32.20 |
| 19830-017 | 5 | 84 | 27 | 08/04/10 08:32:43 | 12.14 | 8.30 | 7.50 | 49332 | 32.18 |
| 19830-009 | 5 | 85 | 27 | 08/04/10 08:32:52 | 12.16 | 8.10 | 7.39 | 49392 | 32.22 |
| 19830-006 | 5 | 86 | 27 | 08/04/10 08:33:05 | 12.21 | 7.49 | 7.40 | 49393 | 32.22 |
| 19830-008 | 5 | 87 | 27 | 08/04/10 08:33:14 | 12.23 | 7.60 | 7.51 | 49352 | 32.20 |
| 19830-007 | 5 | 88 | 27 | 08/04/10 08:33:21 | 12.24 | 7.85 | 7.56 | 49420 | 32.25 |
| 19830-014 | 5 | 89 | 27 | 08/04/10 08:33:29 | 12.23 | 8.09 | 7.53 | 49398 | 32.23 |
| 19830-015 | 5 | 90 | 27 | 08/04/10 08:33:36 | 12.22 | 8.22 | 7.54 | 49381 | 32.22 |
| 19830-005 | 6 | 91 | 27 | 08/04/10 08:33:42 | 12.22 | 8.31 | 7.58 | 49384 | 32.22 |
| 19830-007 | 6 | 92 | 27 | 08/04/10 08:33:49 | 12.24 | 8.38 | 7.62 | 49402 | 32.23 |
| 19830-002 | 6 | 93 | 27 | 08/04/10 08:33:56 | 12.28 | 8.43 | 7.57 | 49456 | 32.27 |
| 19830-009 | 6 | 94 | 27 | 08/04/10 08:34:03 | 12.33 | 8.42 | 7.55 | 49431 | 32.26 |
| 19830-013 | 6 | 95 | 27 | 08/04/10 08:34:10 | 12.37 | 8.30 | 7.51 | 49426 | 32.26 |
| 19830-004 | 6 | 96 | 27 | 08/04/10 08:34:15 | 12.41 | 8.15 | 7.50 | 49567 | 32.36 |
| 19830-012 | 6 | 97 | 27 | 08/04/10 08:39:25 | 12.35 | 8.50 | 7.61 | 49280 | 32.15 |
| 19830-015 | 6 | 98 | 27 | 08/04/10 08:39:32 | 12.30 | 8.43 | 7.61 | 49286 | 32.15 |
| 19830-014 | 6 | 99 | 27 | 08/04/10 08:39:41 | 12.19 | 8.38 | 7.64 | 49393 | 32.22 |
| 19830-003 | 6 | 100 | 27 | 08/04/10 08:39:53 | 12.15 | 8.46 | 7.64 | 49492 | 32.29 |
| 19830-010 | 6 | 101 | 27 | 08/04/10 08:40:13 | 12.15 | 8.73 | 7.73 | 49178 | 32.07 |
| 19830-000 | 6 | 102 | 27 | 08/04/10 08:40:20 | 12.14 | 8.85 | 7.70 | 49449 | 32.26 |
| 19830-016 | 6 | 103 | 27 | 08/04/10 08:40:29 | 12.10 | 8.88 | 7.65 | 49531 | 32.32 |
| 19830-001 | 6 | 104 | 27 | 08/04/10 08:40:37 | 12.12 | 8.75 | 7.70 | 49546 | 32.33 |
| 19830-017 | 6 | 105 | 27 | 08/04/10 08:40:46 | 12.09 | 8.70 | 7.70 | 49405 | 32.23 |
| 19830-008 | 6 | 106 | 27 | 08/04/10 08:40:55 | 12.07 | 8.72 | 7.73 | 49456 | 32.26 |
| 19830-011 | 6 | 107 | 27 | 08/04/10 08:41:02 | 12.09 | 8.77 | 7.75 | 49497 | 32.29 |
| 19830-006 | 6 | 108 | 27 | 08/04/10 08:41:10 | 12.19 | 8.76 | 7.71 | 49595 | 32.37 |
| 19830-015 | 7 | 109 | 27 | 08/04/10 08:41:19 | 12.33 | 8.70 | 7.67 | 49640 | 32.41 |
| 19830-017 | 7 | 110 | 27 | 08/04/10 08:41:25 | 12.42 | 8.64 | 7.64 | 49668 | 32.43 |
| 19830-003 | 7 | 111 | 27 | 08/04/10 08:41:33 | 12.54 | 8.53 | 7.60 | 49627 | 32.41 |
| 19830-008 | 7 | 112 | 27 | 08/04/10 08:41:42 | 12.66 | 8.46 | 7.65 | 49614 | 32.41 |
| 19830-006 | 7 | 113 | 27 | 08/04/10 08:41:52 | 12.57 | 8.59 | 7.68 | 49245 | 32.13 |
| 19830-012 | 7 | 114 | 27 | 08/04/10 08:42:00 | 12.52 | 8.67 | 7.63 | 49152 | 32.06 |
| 19830-004 | 7 | 115 | 27 | 08/04/10 08:42:12 | 12.41 | 8.64 | 7.62 | 49191 | 32.09 |
| 19830-011 | 7 | 116 | 27 | 08/04/10 08:42:27 | 12.33 | 8.52 | 7.62 | 49218 | 32.10 |
| 19830-014 | 7 | 117 | 27 | 08/04/10 08:42:42 | 12.29 | 8.34 | 7.67 | 47856 | 31.12 |
| 19830-005 | 7 | 118 | 27 | 08/04/10 08:42:52 | 12.28 | 8.47 | 7.65 | 49231 | 32.11 |
| 19830-001 | 7 | 119 | 27 | 08/04/10 08:43:00 | 12.28 | 8.52 | 7.62 | 49214 | 32.10 |
| 19830-000 | 7 | 120 | 27 | 08/04/10 08:43:06 | 12.28 | 8.50 | 7.61 | 49232 | 32.11 |
| 19830-009 | 7 | 121 | 27 | 08/04/10 08:43:14 | 12.19 | 8.57 | 7.60 | 49277 | 32.14 |
| 19830-010 | 7 | 122 | 27 | 08/04/10 08:43:21 | 12.13 | 8.62 | 7.57 | 49316 | 32.17 |
| 19830-007 | 7 | 123 | 27 | 08/04/10 08:43:30 | 12.13 | 8.47 | 7.51 | 49394 | 32.22 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-002 | 7 | 124 | 27 | 08/04/10 08:43:40 | 12.18 | 8.33 | 7.49 | 49474 | 32.28 |
| 19830-013 | 7 | 125 | 27 | 08/04/10 08:43:48 | 12.23 | 8.23 | 7.50 | 49499 | 32.30 |
| 19830-016 | 7 | 126 | 27 | 08/04/10 08:43:57 | 12.36 | 8.23 | 7.51 | 49497 | 32.31 |
| 19830-017 | 8 | 127 | 27 | 08/04/10 08:44:06 | 12.50 | 8.18 | 7.48 | 49439 | 32.27 |
| 19830-013 | 8 | 128 | 27 | 08/04/10 08:44:14 | 12.60 | 8.09 | 7.49 | 49498 | 32.32 |
| 19830-010 | 8 | 129 | 27 | 08/04/10 08:44:24 | 12.62 | 8.18 | 7.57 | 48507 | 31.60 |
| 19830-007 | 8 | 130 | 27 | 08/04/10 08:44:33 | 12.60 | 8.29 | 7.53 | 49151 | 32.07 |
| 19830-011 | 8 | 131 | 27 | 08/04/10 08:44:40 | 12.53 | 8.22 | 7.45 | 49162 | 32.07 |
| 19830-002 | 8 | 132 | 27 | 08/04/10 08:44:54 | 12.38 | 7.53 | 7.40 | 49319 | 32.18 |
| 19830-004 | 8 | 133 | 27 | 08/04/10 08:45:02 | 12.38 | 7.21 | 7.40 | 49277 | 32.15 |
| 19830-003 | 8 | 134 | 27 | 08/04/10 08:45:10 | 12.38 | 7.22 | 7.41 | 49248 | 32.13 |
| 19830-005 | 8 | 135 | 27 | 08/04/10 08:45:18 | 12.36 | 7.53 | 7.42 | 49247 | 32.13 |
| 19830-012 | 8 | 136 | 27 | 08/04/10 08:45:27 | 12.29 | 7.60 | 7.44 | 49352 | 32.20 |
| 19830-006 | 8 | 137 | 27 | 08/04/10 08:45:34 | 12.24 | 7.61 | 7.51 | 49440 | 32.26 |
| 19830-001 | 8 | 138 | 27 | 08/04/10 08:45:41 | 12.23 | 7.75 | 7.54 | 49437 | 32.26 |
| 19830-014 | 8 | 139 | 27 | 08/04/10 08:45:47 | 12.23 | 7.86 | 7.56 | 49391 | 32.22 |
| 19830-000 | 8 | 140 | 27 | 08/04/10 08:45:52 | 12.26 | 7.92 | 7.51 | 49419 | 32.25 |
| 19830-009 | 8 | 141 | 27 | 08/04/10 08:45:59 | 12.30 | 7.89 | 7.52 | 49505 | 32.31 |
| 19830-008 | 8 | 142 | 27 | 08/04/10 08:46:07 | 12.38 | 8.02 | 7.58 | 49509 | 32.32 |
| 19830-015 | 8 | 143 | 27 | 08/04/10 08:46:14 | 12.44 | 8.17 | 7.63 | 49567 | 32.36 |
| 19830-016 | 8 | 144 | 27 | 08/04/10 08:46:23 | 12.59 | 8.30 | 7.61 | 49505 | 32.32 |
| | | | | | | | | | |
| 19830-002 | 1 | 1 | 28 | 08/05/10 08:26:06 | 13.09 | 9.77 | 7.49 | 48932 | 31.93 |
| 19830-016 | 1 | 2 | 28 | 08/05/10 08:27:24 | 12.95 | 9.07 | 7.52 | 40372 | 25.79 |
| 19830-015 | 1 | 3 | 28 | 08/05/10 08:28:03 | 12.86 | 8.02 | 7.57 | 49061 | 32.01 |
| 19830-017 | 1 | 4 | 28 | 08/05/10 08:28:21 | 12.88 | 7.88 | 7.55 | 49063 | 32.01 |
| 19830-001 | 1 | 5 | 28 | 08/05/10 08:28:38 | 12.88 | 7.92 | 7.64 | 49103 | 32.04 |
| 19830-011 | 1 | 6 | 28 | 08/05/10 08:29:14 | 12.86 | 7.78 | 7.52 | 48947 | 31.93 |
| 19830-014 | 1 | 7 | 28 | 08/05/10 08:30:12 | 12.82 | 5.56 | 7.23 | 49077 | 32.02 |
| 19830-009 | 1 | 8 | 28 | 08/05/10 08:30:54 | 12.74 | 6.50 | 7.40 | 48543 | 31.63 |
| 19830-012 | 1 | 9 | 28 | 08/05/10 08:31:16 | 12.76 | 6.71 | 7.41 | 49022 | 31.98 |
| 19830-010 | 1 | 10 | 28 | 08/05/10 08:31:38 | 12.65 | 7.16 | 7.46 | 48983 | 31.95 |
| 19830-008 | 1 | 11 | 28 | 08/05/10 08:31:55 | 12.56 | 7.45 | 7.56 | 49099 | 32.03 |
| 19830-006 | 1 | 12 | 28 | 08/05/10 08:32:22 | 12.51 | 7.95 | 7.62 | 49098 | 32.02 |
| 19830-004 | 1 | 13 | 28 | 08/05/10 08:32:48 | 12.53 | 7.91 | 7.43 | 49082 | 32.01 |
| 19830-013 | 1 | 14 | 28 | 08/05/10 08:33:09 | 12.54 | 7.59 | 7.40 | 49077 | 32.01 |
| 19830-000 | 1 | 15 | 28 | 08/05/10 08:33:26 | 12.53 | 7.68 | 7.42 | 49091 | 32.02 |
| 19830-005 | 1 | 16 | 28 | 08/05/10 08:34:00 | 12.50 | 8.21 | 7.69 | 49154 | 32.06 |
| 19830-007 | 1 | 17 | 28 | 08/05/10 08:34:15 | 12.49 | 8.31 | 7.64 | 49228 | 32.12 |
| 19830-003 | 1 | 18 | 28 | 08/05/10 08:34:42 | 12.60 | 8.10 | 7.52 | 49177 | 32.09 |
| 19830-009 | 2 | 19 | 28 | 08/05/10 08:35:49 | 12.88 | 7.72 | 7.56 | 49052 | 32.01 |
| 19830-016 | 2 | 20 | 28 | 08/05/10 08:36:13 | 12.83 | 7.58 | 7.53 | 49058 | 32.01 |
| 19830-007 | 2 | 21 | 28 | 08/05/10 08:36:33 | 12.84 | 7.45 | 7.45 | 49048 | 32.00 |
| 19830-015 | 2 | 22 | 28 | 08/05/10 08:36:51 | 12.84 | 7.39 | 7.46 | 49042 | 32.00 |
| 19830-008 | 2 | 23 | 28 | 08/05/10 08:37:15 | 12.82 | 7.62 | 7.69 | 48825 | 31.84 |
| 19830-002 | 2 | 24 | 28 | 08/05/10 08:37:40 | 12.78 | 7.52 | 7.49 | 49038 | 31.99 |
| 19830-012 | 2 | 25 | 28 | 08/05/10 08:37:57 | 12.72 | 7.30 | 7.45 | 49006 | 31.97 |
| 19830-004 | 2 | 26 | 28 | 08/05/10 08:38:14 | 12.73 | 7.25 | 7.42 | 49042 | 31.99 |
| 19830-000 | 2 | 27 | 28 | 08/05/10 08:38:41 | 12.59 | 7.77 | 7.52 | 49025 | 31.97 |
| 19830-003 | 2 | 28 | 28 | 08/05/10 08:39:03 | 12.54 | 8.02 | 7.51 | 48565 | 31.64 |
| 19830-011 | 2 | 29 | 28 | 08/05/10 08:39:33 | 12.58 | 7.72 | 7.51 | 49061 | 32.00 |
| 19830-017 | 2 | 30 | 28 | 08/05/10 08:39:55 | 12.55 | 7.60 | 7.42 | 49044 | 31.99 |
| 19830-014 | 2 | 31 | 28 | 08/05/10 08:40:23 | 12.49 | 7.00 | 7.34 | 49064 | 32.00 |
| 19830-001 | 2 | 32 | 28 | 08/05/10 08:40:55 | 12.46 | 6.42 | 7.47 | 49084 | 32.01 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-013 | 2 | 33 | 28 | 08/05/10 08:41:34 | 12.48 | 7.67 | 7.51 | 49122 | 32.04 |
| 19830-010 | 2 | 34 | 28 | 08/05/10 08:41:55 | 12.55 | 7.77 | 7.48 | 49072 | 32.01 |
| 19830-006 | 2 | 35 | 28 | 08/05/10 08:42:48 | 12.81 | 6.77 | 7.37 | 49092 | 32.03 |
| 19830-005 | 2 | 36 | 28 | 08/05/10 08:43:10 | 12.79 | 6.99 | 7.53 | 49092 | 32.03 |
| 19830-013 | 3 | 37 | 28 | 08/05/10 08:43:29 | 12.71 | 7.27 | 7.46 | 49094 | 32.03 |
| 19830-009 | 3 | 38 | 28 | 08/05/10 08:43:49 | 12.77 | 7.28 | 7.49 | 49075 | 32.02 |
| 19830-017 | 3 | 39 | 28 | 08/05/10 08:44:13 | 12.83 | 6.71 | 7.29 | 49021 | 31.98 |
| 19830-016 | 3 | 40 | 28 | 08/05/10 08:44:40 | 12.64 | 6.47 | 7.28 | 49149 | 32.07 |
| 19830-000 | 3 | 41 | 28 | 08/05/10 08:45:06 | 12.65 | 7.61 | 7.53 | 49086 | 32.02 |
| 19830-010 | 3 | 42 | 28 | 08/05/10 08:45:33 | 12.73 | 7.35 | 7.41 | 49041 | 31.99 |
| 19830-008 | 3 | 43 | 28 | 08/05/10 08:46:32 | 12.68 | 6.78 | 7.44 | 48986 | 31.95 |
| 19830-014 | 3 | 44 | 28 | 08/05/10 08:46:57 | 12.65 | 7.01 | 7.49 | 49044 | 31.99 |
| 19830-004 | 3 | 45 | 28 | 08/05/10 08:47:17 | 12.63 | 7.18 | 7.38 | 48988 | 31.95 |
| 19830-006 | 3 | 46 | 28 | 08/05/10 08:47:38 | 12.63 | 7.13 | 7.45 | 49070 | 32.01 |
| 19830-005 | 3 | 47 | 28 | 08/05/10 08:47:57 | 12.61 | 7.48 | 7.53 | 49077 | 32.01 |
| 19830-011 | 3 | 48 | 28 | 08/05/10 08:48:41 | 12.33 | 7.97 | 7.59 | 49293 | 32.16 |
| 19830-002 | 3 | 49 | 28 | 08/05/10 08:48:56 | 12.43 | 8.01 | 7.50 | 49141 | 32.05 |
| 19830-012 | 3 | 50 | 28 | 08/05/10 08:49:14 | 12.59 | 7.59 | 7.50 | 48876 | 31.87 |
| 19830-001 | 3 | 51 | 28 | 08/05/10 08:49:49 | 12.30 | 8.18 | 7.60 | 49209 | 32.10 |
| 19830-003 | 3 | 52 | 28 | 08/05/10 08:50:06 | 12.29 | 8.10 | 7.61 | 49158 | 32.06 |
| 19830-007 | 3 | 53 | 28 | 08/05/10 08:50:30 | 12.31 | 8.05 | 7.49 | 49111 | 32.02 |
| 19830-015 | 3 | 54 | 28 | 08/05/10 08:50:46 | 12.29 | 7.89 | 7.58 | 49157 | 32.06 |
| 19830-006 | 4 | 55 | 28 | 08/05/10 08:51:13 | 12.22 | 8.20 | 7.66 | 49139 | 32.04 |
| 19830-011 | 4 | 56 | 28 | 08/05/10 08:51:37 | 12.13 | 8.14 | 7.63 | 49159 | 32.05 |
| 19830-012 | 4 | 57 | 28 | 08/05/10 08:52:12 | 12.08 | 8.44 | 7.68 | 49155 | 32.05 |
| 19830-010 | 4 | 58 | 28 | 08/05/10 08:52:30 | 12.04 | 8.48 | 7.68 | 49212 | 32.09 |
| 19830-015 | 4 | 59 | 28 | 08/05/10 08:52:46 | 11.97 | 8.44 | 7.65 | 49212 | 32.08 |
| 19830-009 | 4 | 60 | 28 | 08/05/10 08:53:07 | 11.92 | 8.23 | 7.65 | 49234 | 32.10 |
| 19830-001 | 4 | 61 | 28 | 08/05/10 08:53:35 | 12.00 | 7.93 | 7.57 | 49268 | 32.13 |
| 19830-016 | 4 | 62 | 28 | 08/05/10 08:53:59 | 12.19 | 7.67 | 7.45 | 49177 | 32.07 |
| 19830-008 | 4 | 63 | 28 | 08/05/10 08:54:25 | 12.36 | 7.58 | 7.53 | 49163 | 32.06 |
| 19830-004 | 4 | 64 | 28 | 08/05/10 08:54:56 | 12.50 | 7.03 | 7.32 | 49153 | 32.06 |
| 19830-007 | 4 | 65 | 28 | 08/05/10 08:57:02 | 12.31 | 7.76 | 7.46 | 49154 | 32.06 |
| 19830-014 | 4 | 66 | 28 | 08/05/10 08:57:26 | 12.25 | 7.38 | 7.39 | 49131 | 32.04 |
| 19830-000 | 4 | 67 | 28 | 08/05/10 08:57:51 | 12.23 | 7.38 | 7.45 | 49110 | 32.02 |
| 19830-017 | 4 | 68 | 28 | 08/05/10 08:58:16 | 12.21 | 7.41 | 7.37 | 49124 | 32.03 |
| 19830-013 | 4 | 69 | 28 | 08/05/10 08:58:45 | 12.22 | 7.56 | 7.52 | 49120 | 32.03 |
| 19830-002 | 4 | 70 | 28 | 08/05/10 08:59:06 | 12.22 | 7.84 | 7.58 | 49150 | 32.05 |
| 19830-005 | 4 | 71 | 28 | 08/05/10 08:59:23 | 12.23 | 7.88 | 7.59 | 49110 | 32.02 |
| 19830-003 | 4 | 72 | 28 | 08/05/10 08:59:46 | 12.24 | 7.87 | 7.57 | 49111 | 32.02 |
| 19830-016 | 5 | 73 | 28 | 08/05/10 09:00:04 | 12.23 | 7.92 | 7.51 | 49129 | 32.03 |
| 19830-003 | 5 | 74 | 28 | 08/05/10 09:00:27 | 12.23 | 7.52 | 7.44 | 49098 | 32.01 |
| 19830-000 | 5 | 75 | 28 | 08/05/10 09:00:53 | 12.29 | 7.48 | 7.47 | 49079 | 32.00 |
| 19830-013 | 5 | 76 | 28 | 08/05/10 09:01:26 | 12.34 | 7.53 | 7.42 | 49066 | 31.99 |
| 19830-001 | 5 | 77 | 28 | 08/05/10 09:02:04 | 12.39 | 7.93 | 7.67 | 48744 | 31.76 |
| 19830-002 | 5 | 78 | 28 | 08/05/10 09:02:32 | 12.47 | 7.54 | 7.43 | 49053 | 31.99 |
| 19830-004 | 5 | 79 | 28 | 08/05/10 09:03:02 | 12.53 | 7.46 | 7.46 | 49056 | 31.99 |
| 19830-012 | 5 | 80 | 28 | 08/05/10 09:03:28 | 12.60 | 7.90 | 7.65 | 49123 | 32.05 |
| 19830-005 | 5 | 81 | 28 | 08/05/10 09:03:59 | 12.32 | 8.02 | 7.61 | 49147 | 32.05 |
| 19830-011 | 5 | 82 | 28 | 08/05/10 09:04:26 | 12.23 | 7.66 | 7.52 | 49136 | 32.04 |
| 19830-010 | 5 | 83 | 28 | 08/05/10 09:04:47 | 12.20 | 7.83 | 7.61 | 49202 | 32.09 |
| 19830-017 | 5 | 84 | 28 | 08/05/10 09:05:04 | 12.20 | 7.86 | 7.49 | 49008 | 31.95 |
| 19830-009 | 5 | 85 | 28 | 08/05/10 09:05:28 | 12.23 | 6.95 | 7.40 | 49151 | 32.05 |
| 19830-006 | 5 | 86 | 28 | 08/05/10 09:05:58 | 12.28 | 7.25 | 7.49 | 49136 | 32.04 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 5 | 87 | 28 | 08/05/10 09:06:17 | 12.29 | 7.74 | 7.64 | 49141 | 32.05 |
| 19830-007 | 5 | 88 | 28 | 08/05/10 09:06:38 | 12.29 | 7.89 | 7.55 | 49072 | 32.00 |
| 19830-014 | 5 | 89 | 28 | 08/05/10 09:07:03 | 12.22 | 8.17 | 7.57 | 49201 | 32.09 |
| 19830-015 | 5 | 90 | 28 | 08/05/10 09:07:21 | 12.23 | 8.12 | 7.59 | 49198 | 32.08 |
| 19830-005 | 6 | 91 | 28 | 08/05/10 09:07:36 | 12.26 | 8.04 | 7.70 | 49172 | 32.07 |
| 19830-007 | 6 | 92 | 28 | 08/05/10 09:07:54 | 12.30 | 8.07 | 7.62 | 49177 | 32.07 |
| 19830-002 | 6 | 93 | 28 | 08/05/10 09:08:15 | 12.36 | 7.87 | 7.59 | 49169 | 32.07 |
| 19830-009 | 6 | 94 | 28 | 08/05/10 09:08:42 | 12.41 | 7.50 | 7.51 | 49132 | 32.04 |
| 19830-013 | 6 | 95 | 28 | 08/05/10 09:09:03 | 12.45 | 7.44 | 7.44 | 49080 | 32.01 |
| 19830-004 | 6 | 96 | 28 | 08/05/10 09:09:25 | 12.50 | 7.65 | 7.49 | 49221 | 32.11 |
| 19830-012 | 6 | 97 | 28 | 08/05/10 09:09:50 | 12.33 | 7.92 | 7.56 | 48827 | 31.82 |
| 19830-015 | 6 | 98 | 28 | 08/05/10 09:10:09 | 12.19 | 7.93 | 7.61 | 49201 | 32.09 |
| 19830-014 | 6 | 99 | 28 | 08/05/10 09:10:28 | 12.15 | 7.92 | 7.63 | 49228 | 32.10 |
| 19830-003 | 6 | 100 | 28 | 08/05/10 09:10:41 | 12.15 | 8.03 | 7.63 | 49246 | 32.12 |
| 19830-010 | 6 | 101 | 28 | 08/05/10 09:10:56 | 12.13 | 8.17 | 7.67 | 49330 | 32.18 |
| 19830-000 | 6 | 102 | 28 | 08/05/10 09:11:13 | 12.13 | 8.38 | 7.62 | 49244 | 32.11 |
| 19830-016 | 6 | 103 | 28 | 08/05/10 09:11:30 | 12.11 | 8.29 | 7.60 | 49261 | 32.12 |
| 19830-001 | 6 | 104 | 28 | 08/05/10 09:11:42 | 12.13 | 8.18 | 7.65 | 49296 | 32.15 |
| 19830-017 | 6 | 105 | 28 | 08/05/10 09:12:02 | 12.08 | 8.25 | 7.60 | 49178 | 32.06 |
| 19830-008 | 6 | 106 | 28 | 08/05/10 09:12:15 | 12.07 | 8.31 | 7.64 | 49241 | 32.11 |
| 19830-011 | 6 | 107 | 28 | 08/05/10 09:12:27 | 12.12 | 8.34 | 7.64 | 49252 | 32.12 |
| 19830-006 | 6 | 108 | 28 | 08/05/10 09:12:41 | 12.26 | 8.17 | 7.64 | 49309 | 32.17 |
| 19830-015 | 7 | 109 | 28 | 08/05/10 09:13:07 | 12.46 | 8.03 | 7.62 | 49264 | 32.14 |
| 19830-017 | 7 | 110 | 28 | 08/05/10 09:13:23 | 12.56 | 7.90 | 7.60 | 49270 | 32.15 |
| 19830-003 | 7 | 111 | 28 | 08/05/10 09:13:40 | 12.65 | 8.00 | 7.58 | 49274 | 32.16 |
| 19830-008 | 7 | 112 | 28 | 08/05/10 09:13:52 | 12.71 | 7.92 | 7.64 | 49331 | 32.20 |
| 19830-006 | 7 | 113 | 28 | 08/05/10 09:16:15 | 12.67 | 8.42 | 7.66 | 48861 | 31.86 |
| 19830-012 | 7 | 114 | 28 | 08/05/10 09:16:31 | 12.53 | 8.22 | 7.65 | 48981 | 31.94 |
| 19830-004 | 7 | 115 | 28 | 08/05/10 09:16:47 | 12.43 | 8.17 | 7.62 | 49040 | 31.98 |
| 19830-011 | 7 | 116 | 28 | 08/05/10 09:17:08 | 12.38 | 7.99 | 7.58 | 49034 | 31.97 |
| 19830-014 | 7 | 117 | 28 | 08/05/10 09:17:48 | 12.33 | 8.26 | 7.68 | 48785 | 31.79 |
| 19830-005 | 7 | 118 | 28 | 08/05/10 09:18:02 | 12.33 | 8.29 | 7.64 | 49013 | 31.95 |
| 19830-001 | 7 | 119 | 28 | 08/05/10 09:18:13 | 12.32 | 8.13 | 7.62 | 48992 | 31.94 |
| 19830-000 | 7 | 120 | 28 | 08/05/10 09:18:27 | 12.32 | 8.04 | 7.64 | 49045 | 31.98 |
| 19830-009 | 7 | 121 | 28 | 08/05/10 09:18:48 | 12.18 | 8.19 | 7.59 | 49138 | 32.04 |
| 19830-010 | 7 | 122 | 28 | 08/05/10 09:19:03 | 12.14 | 7.97 | 7.57 | 49164 | 32.06 |
| 19830-007 | 7 | 123 | 28 | 08/05/10 09:19:22 | 12.19 | 7.72 | 7.51 | 49173 | 32.06 |
| 19830-002 | 7 | 124 | 28 | 08/05/10 09:19:42 | 12.25 | 7.60 | 7.50 | 49192 | 32.08 |
| 19830-013 | 7 | 125 | 28 | 08/05/10 09:20:03 | 12.32 | 7.74 | 7.54 | 49247 | 32.12 |
| 19830-016 | 7 | 126 | 28 | 08/05/10 09:20:20 | 12.45 | 7.85 | 7.55 | 49168 | 32.07 |
| 19830-017 | 8 | 127 | 28 | 08/05/10 09:20:38 | 12.59 | 7.68 | 7.50 | 49153 | 32.07 |
| 19830-013 | 8 | 128 | 28 | 08/05/10 09:20:50 | 12.69 | 7.61 | 7.55 | 49199 | 32.10 |
| 19830-010 | 8 | 129 | 28 | 08/05/10 09:21:11 | 12.69 | 7.86 | 7.62 | 49082 | 32.02 |
| 19830-007 | 8 | 130 | 28 | 08/05/10 09:21:26 | 12.64 | 7.67 | 7.52 | 48993 | 31.95 |
| 19830-011 | 8 | 131 | 28 | 08/05/10 09:21:42 | 12.54 | 7.08 | 7.39 | 49023 | 31.97 |
| 19830-002 | 8 | 132 | 28 | 08/05/10 09:21:56 | 12.44 | 6.58 | 7.41 | 49096 | 32.02 |
| 19830-004 | 8 | 133 | 28 | 08/05/10 09:22:11 | 12.43 | 6.60 | 7.44 | 49087 | 32.01 |
| 19830-003 | 8 | 134 | 28 | 08/05/10 09:22:27 | 12.43 | 7.24 | 7.53 | 49083 | 32.01 |
| 19830-005 | 8 | 135 | 28 | 08/05/10 09:22:41 | 12.39 | 7.56 | 7.45 | 49083 | 32.01 |
| 19830-012 | 8 | 136 | 28 | 08/05/10 09:22:52 | 12.36 | 7.04 | 7.50 | 49109 | 32.03 |
| 19830-006 | 8 | 137 | 28 | 08/05/10 09:23:07 | 12.28 | 7.32 | 7.54 | 49204 | 32.09 |
| 19830-001 | 8 | 138 | 28 | 08/05/10 09:23:21 | 12.26 | 7.48 | 7.60 | 49237 | 32.11 |
| 19830-014 | 8 | 139 | 28 | 08/05/10 09:23:38 | 12.28 | 7.60 | 7.51 | 49174 | 32.07 |
| 19830-000 | 8 | 140 | 28 | 08/05/10 09:23:53 | 12.34 | 7.15 | 7.55 | 49156 | 32.06 |

| Sample Code | Replicate | Position | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 141 | 28 | 08/05/10 09:24:16 | 12.40 | 7.94 | 7.62 | 49181 | 32.08 |
| 19830-008 | 8 | 142 | 28 | 08/05/10 09:24:35 | 12.45 | 8.05 | 7.66 | 49238 | 32.12 |
| 19830-015 | 8 | 143 | 28 | 08/05/10 09:24:46 | 12.50 | 8.08 | 7.69 | 49285 | 32.16 |
| 19830-016 | 8 | 144 | 28 | 08/05/10 09:25:03 | 12.68 | 7.92 | 7.64 | 49186 | 32.10 |

**Bioaccumulation Evaluation - Survival Endpoint** **EnviroSystems, Inc.**

**Start Date:** 01 Jul-10 12:00 **Species:** Nereis virens **Sample Code:** 19830-000
**End Date:** **Protocol:** ASTM E 1688 (2000a) **Sample Source:** Gowanus Canal Superfund Site
**Sample Date:** 25 Jun-10 12:00 **Material:** Marine Sediment **Sample Station:** Laboratory Control; 19830-000

| Sample Code | Rep | Pos | # Exposed | # Survived | Total Weight-mg | Tare Weight-mg | Pan Count | Mean Length-mm |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 1 | 1 | 10 | 10 | 25.64 | 0 | 10 | |
| 19830-001 | 1 | 2 | 10 | 10 | 27.12 | 0 | 10 | |
| 19830-017 | 1 | 3 | 10 | 8 | 22.84 | 0 | 8 | |
| 19830-007 | 1 | 4 | 10 | 5 | 13.27 | 0 | 5 | |
| 19830-002 | 1 | 5 | 10 | 10 | 27.6 | 0 | 10 | |
| 19830-006 | 1 | 6 | 10 | 9 | 24.73 | 0 | 9 | |
| 19830-000 | 1 | 7 | 10 | 10 | 26.37 | 0 | 10 | |
| 19830-004 | 1 | 8 | 11 | 11 | 27.9 | 0 | 11 | |
| 19830-016 | 1 | 9 | 10 | 8 | 19.35 | 0 | 8 | |
| 19830-003 | 1 | 10 | 10 | 9 | 27.15 | 0 | 9 | |
| 19830-010 | 1 | 11 | 10 | 9 | 24.81 | 0 | 9 | |
| 19830-014 | 1 | 12 | 10 | 10 | 21.74 | 0 | 10 | |
| 19830-011 | 1 | 13 | 10 | 10 | 23.53 | 0 | 10 | |
| 19830-012 | 1 | 14 | 10 | 9 | 22.82 | 0 | 9 | |
| 19830-005 | 1 | 15 | 10 | 4 | 14.31 | 0 | 4 | |
| 19830-013 | 1 | 16 | 10 | 9 | 29.29 | 0 | 9 | |
| 19830-008 | 1 | 17 | 10 | 10 | 30.04 | 0 | 10 | |
| 19830-015 | 1 | 18 | 10 | 10 | 20.96 | 0 | 10 | |
| 19830-003 | 2 | 19 | 10 | 8 | 32.75 | 0 | 8 | |
| 19830-013 | 2 | 20 | 10 | 10 | 24.43 | 0 | 10 | |
| 19830-012 | 2 | 21 | 10 | 9 | 27.18 | 0 | 9 | |
| 19830-005 | 2 | 22 | 10 | 8 | 26.82 | 0 | 8 | |
| 19830-002 | 2 | 23 | 10 | 8 | 31.8 | 0 | 8 | |
| 19830-017 | 2 | 24 | 10 | 8 | 33.95 | 0 | 8 | |
| 19830-008 | 2 | 25 | 10 | 8 | 26.08 | 0 | 8 | |
| 19830-009 | 2 | 26 | 10 | 8 | 19.45 | 0 | 8 | |
| 19830-000 | 2 | 27 | 10 | 10 | 36.15 | 0 | 10 | |
| 19830-016 | 2 | 28 | 10 | 10 | 27.81 | 0 | 10 | |
| 19830-015 | 2 | 29 | 10 | 10 | 30.94 | 0 | 10 | |
| 19830-014 | 2 | 30 | 10 | 8 | 24.28 | 0 | 8 | |
| 19830-010 | 2 | 31 | 10 | 9 | 30.7 | 0 | 9 | |
| 19830-004 | 2 | 32 | 10 | 9 | 29.4 | 0 | 9 | |
| 19830-007 | 2 | 33 | 10 | 8 | 20 | 0 | 8 | |
| 19830-011 | 2 | 34 | 10 | 9 | 26.53 | 0 | 9 | |
| 19830-006 | 2 | 35 | 10 | 5 | 17.17 | 0 | 5 | |
| 19830-001 | 2 | 36 | 10 | 7 | 30.49 | 0 | 7 | |
| 19830-013 | 3 | 37 | 10 | 8 | 26.65 | 0 | 8 | |
| 19830-009 | 3 | 38 | 11 | 11 | 34.93 | 0 | 11 | |
| 19830-011 | 3 | 39 | 10 | 8 | 29.43 | 0 | 8 | |
| 19830-000 | 3 | 40 | 10 | 9 | 26.97 | 0 | 9 | |
| 19830-004 | 3 | 41 | 10 | 10 | 33.9 | 0 | 10 | |
| 19830-006 | 3 | 42 | 10 | 8 | 23.4 | 0 | 8 | |
| 19830-015 | 3 | 43 | 10 | 10 | 31.8 | 0 | 10 | |
| 19830-012 | 3 | 44 | 10 | 9 | 17.77 | 0 | 9 | |
| 19830-001 | 3 | 45 | 10 | 9 | 27.82 | 0 | 9 | |
| 19830-003 | 3 | 46 | 10 | 9 | 24.78 | 0 | 9 | |
| 19830-016 | 3 | 47 | 10 | 8 | 23.4 | 0 | 8 | |

| Sample Code | Rep | Pos | # Exposed | # Survived | Total Weight-mg | Tare Weight-mg | Pan Count | Mean Length-mm |
|---|---|---|---|---|---|---|---|---|
| 19830-007 | 3 | 48 | 10 | 9 | 21.31 | 0 | 9 | |
| 19830-017 | 3 | 49 | 10 | 9 | 33.85 | 0 | 9 | |
| 19830-005 | 3 | 50 | 10 | 8 | 28.69 | 0 | 8 | |
| 19830-008 | 3 | 51 | 10 | 9 | 27.47 | 0 | 9 | |
| 19830-014 | 3 | 52 | 10 | 8 | 26.73 | 0 | 8 | |
| 19830-002 | 3 | 53 | 10 | 10 | 44.08 | 0 | 10 | |
| 19830-010 | 3 | 54 | 10 | 7 | 25.78 | 0 | 7 | |
| 19830-006 | 4 | 55 | 10 | 7 | 17.07 | 0 | 7 | |
| 19830-004 | 4 | 56 | 10 | 8 | 27.49 | 0 | 8 | |
| 19830-014 | 4 | 57 | 10 | 10 | 35.14 | 0 | 10 | |
| 19830-017 | 4 | 58 | 10 | 8 | 26.32 | 0 | 8 | |
| 19830-010 | 4 | 59 | 10 | 9 | 31.43 | 0 | 9 | |
| 19830-005 | 4 | 60 | 10 | 4 | 13.95 | 0 | 4 | |
| 19830-008 | 4 | 61 | 10 | 8 | 36.27 | 0 | 8 | |
| 19830-012 | 4 | 62 | 10 | 10 | 26.64 | 0 | 10 | |
| 19830-011 | 4 | 63 | 10 | 10 | 32.71 | 0 | 10 | |
| 19830-000 | 4 | 64 | 10 | 10 | 30.86 | 0 | 10 | |
| 19830-013 | 4 | 65 | 10 | 9 | 28.53 | 0 | 9 | |
| 19830-007 | 4 | 66 | 10 | 9 | 22.46 | 0 | 9 | |
| 19830-015 | 4 | 67 | 10 | 10 | 32.05 | 0 | 10 | |
| 19830-001 | 4 | 68 | 10 | 8 | 31.15 | 0 | 8 | |
| 19830-009 | 4 | 69 | 10 | 10 | 36.66 | 0 | 10 | |
| 19830-002 | 4 | 70 | 10 | 10 | 30.92 | 0 | 10 | |
| 19830-016 | 4 | 71 | 10 | 8 | 24.84 | 0 | 8 | |
| 19830-003 | 4 | 72 | 10 | 9 | 28.31 | 0 | 9 | |
| 19830-017 | 5 | 73 | 10 | 9 | 30.35 | 0 | 9 | |
| 19830-001 | 5 | 74 | 10 | 9 | 24.62 | 0 | 9 | |
| 19830-005 | 5 | 75 | 10 | 6 | 11.82 | 0 | 6 | |
| 19830-006 | 5 | 76 | 10 | 9 | 27.89 | 0 | 9 | |
| 19830-011 | 5 | 77 | 10 | 9 | 28.77 | 0 | 9 | |
| 19830-003 | 5 | 78 | 10 | 8 | 31.81 | 0 | 8 | |
| 19830-008 | 5 | 79 | 10 | 10 | 27.38 | 0 | 10 | |
| 19830-010 | 5 | 80 | 10 | 8 | 28.47 | 0 | 8 | |
| 19830-004 | 5 | 81 | 10 | 9 | 35.94 | 0 | 9 | |
| 19830-000 | 5 | 82 | 10 | 10 | 29.2 | 0 | 10 | |
| 19830-015 | 5 | 83 | 10 | 10 | 27.8 | 0 | 10 | |
| 19830-009 | 5 | 84 | 10 | 9 | 33.18 | 0 | 9 | |
| 19830-007 | 5 | 85 | 10 | 7 | 14.21 | 0 | 7 | |
| 19830-012 | 5 | 86 | 10 | 9 | 28.01 | 0 | 9 | |
| 19830-016 | 5 | 87 | 10 | 8 | 25.92 | 0 | 8 | |
| 19830-014 | 5 | 88 | 10 | 9 | 28.09 | 0 | 9 | |
| 19830-002 | 5 | 89 | 10 | 10 | 33.8 | 0 | 10 | |
| 19830-013 | 5 | 90 | 10 | 8 | 33.49 | 0 | 8 | |
| 19830-011 | 6 | 91 | 10 | 8 | 22.83 | 0 | 8 | |
| 19830-010 | 6 | 92 | 10 | 8 | 25.74 | 0 | 8 | |
| 19830-015 | 6 | 93 | 10 | 10 | 27.14 | 0 | 10 | |
| 19830-002 | 6 | 94 | 10 | 10 | 32.93 | 0 | 10 | |
| 19830-004 | 6 | 95 | 10 | 7 | 21.19 | 0 | 7 | |
| 19830-001 | 6 | 96 | 10 | 9 | 17.73 | 0 | 9 | |
| 19830-000 | 6 | 97 | 10 | 9 | 24.08 | 0 | 9 | |
| 19830-012 | 6 | 98 | 10 | 7 | 19.6 | 0 | 7 | |
| 19830-008 | 6 | 99 | 10 | 7 | 20.48 | 0 | 7 | |

| Sample Code | Rep | Pos | # Exposed | # Survived | Total Weight-mg | Tare Weight-mg | Pan Count | Mean Length-mm |
|---|---|---|---|---|---|---|---|---|
| 19830-006 | 6 | 100 | 10 | 7 | 21.69 | 0 | 7 | |
| 19830-016 | 6 | 101 | 10 | 10 | 31.75 | 0 | 10 | |
| 19830-007 | 6 | 102 | 10 | 8 | 20.78 | 0 | 8 | |
| 19830-013 | 6 | 103 | 10 | 7 | 19.84 | 0 | 7 | |
| 19830-017 | 6 | 104 | 10 | 9 | 23.17 | 0 | 9 | |
| 19830-014 | 6 | 105 | 12 | 12 | 34.47 | 0 | 12 | |
| 19830-005 | 6 | 106 | 10 | 5 | 13.81 | 0 | 5 | |
| 19830-009 | 6 | 107 | 10 | 8 | 22.47 | 0 | 8 | |
| 19830-003 | 6 | 108 | 10 | 10 | 28.9 | 0 | 10 | |
| 19830-014 | 7 | 109 | 10 | 9 | 23.7 | 0 | 9 | |
| 19830-004 | 7 | 110 | 10 | 5 | 12.47 | 0 | 5 | |
| 19830-002 | 7 | 111 | 10 | 9 | 27.47 | 0 | 9 | |
| 19830-016 | 7 | 112 | 10 | 9 | 26.18 | 0 | 9 | |
| 19830-012 | 7 | 113 | 10 | 7 | 17.45 | 0 | 7 | |
| 19830-006 | 7 | 114 | 10 | 7 | 21.2 | 0 | 7 | |
| 19830-011 | 7 | 115 | 10 | 10 | 20.06 | 0 | 10 | |
| 19830-015 | 7 | 116 | 10 | 10 | 26.38 | 0 | 10 | |
| 19830-000 | 7 | 117 | 11 | 11 | 33.45 | 0 | 11 | |
| 19830-007 | 7 | 118 | 10 | 5 | 13.74 | 0 | 5 | |
| 19830-009 | 7 | 119 | 10 | 7 | 21.05 | 0 | 7 | |
| 19830-008 | 7 | 120 | 10 | 9 | 20.48 | 0 | 9 | |
| 19830-005 | 7 | 121 | 10 | 5 | 13.95 | 0 | 5 | |
| 19830-003 | 7 | 122 | 10 | 9 | 28.02 | 0 | 9 | |
| 19830-001 | 7 | 123 | 10 | 10 | 30.35 | 0 | 10 | |
| 19830-010 | 7 | 124 | 10 | 10 | 29.77 | 0 | 10 | |
| 19830-017 | 7 | 125 | 10 | 8 | 21.66 | 0 | 8 | |
| 19830-013 | 7 | 126 | 10 | 10 | 30.79 | 0 | 10 | |
| 19830-015 | 8 | 127 | 10 | 8 | 23.88 | 0 | 8 | |
| 19830-012 | 8 | 128 | 10 | 8 | 20.6 | 0 | 8 | |
| 19830-010 | 8 | 129 | 10 | 8 | 23.81 | 0 | 8 | |
| 19830-014 | 8 | 130 | 10 | 10 | 24.39 | 0 | 10 | |
| 19830-016 | 8 | 131 | 10 | 8 | 23.48 | 0 | 8 | |
| 19830-007 | 8 | 132 | 10 | 6 | 17.16 | 0 | 6 | |
| 19830-005 | 8 | 133 | 10 | 9 | 27.01 | 0 | 9 | |
| 19830-009 | 8 | 134 | 10 | 8 | 24.9 | 0 | 8 | |
| 19830-004 | 8 | 135 | 10 | 10 | 25.95 | 0 | 10 | |
| 19830-000 | 8 | 136 | 10 | 10 | 22.89 | 0 | 10 | |
| 19830-002 | 8 | 137 | 10 | 8 | 28.4 | 0 | 8 | |
| 19830-001 | 8 | 138 | 10 | 8 | 24.18 | 0 | 8 | |
| 19830-006 | 8 | 139 | 10 | 8 | 25.62 | 0 | 8 | |
| 19830-003 | 8 | 140 | 10 | 6 | 20.05 | 0 | 6 | |
| 19830-011 | 8 | 141 | 10 | 6 | 22.12 | 0 | 6 | |
| 19830-013 | 8 | 142 | 10 | 9 | 32.15 | 0 | 9 | |
| 19830-008 | 8 | 143 | 10 | 7 | 18.36 | 0 | 7 | |
| 19830-017 | 8 | 144 | 10 | 8 | 21.34 | 0 | 8 | |

# *Nereis virens* 28 Day Assay

**STUDY NUMBER:** 19875 **PROJECT:** Gowanus Canal Superfund Site

**DATE:** 08/05/10 **CLIENT:** HDR Engineering, Inc.

| Sample Code | Rep | Pos | # Survived | Pan Count | Weight | Initials |
|---|---|---|---|---|---|---|
| 19830-002 | 1 | 1 | 10 | 10 | 27.60 | JTP |
| 19830-016 | 1 | 2 | 8 | 8 | 19.35 | |
| 19830-015 | 1 | 3 | 10 | 10 | 20.96 | |
| 19830-017 | 1 | 4 | 8 | 8 | 22.84 | |
| 19830-001 | 1 | 5 | 10 | 10 | 27.12 | |
| 19830-011 | 1 | 6 | 10 | 10 | 23.53 | |
| 19830-014 | 1 | 7 | 10 | 10 | 21.74 | |
| 19830-009 | 1 | 8 | 10 | 10 | 25.64 | |
| 19830-012 | 1 | 9 | 9 | 9 | 22.82 | |
| 19830-010 | 1 | 10 | 9 | 9 | 24.81 | |
| 19830-008 | 1 | 11 | 10 | 10 | 30.04 | |
| 19830-006 | 1 | 12 | 9 | 9 | 24.73 | |
| 19830-004 | 1 | 13 | 11 | 11 | 27.90 | |
| 19830-013 | 1 | 14 | 9 | 9 | 29.29 | |
| 19830-000 | 1 | 15 | 10 | 10 | 26.37 | |
| 19830-005 | 1 | 16 | 4 | 4 | 14.31 | |
| 19830-007 | 1 | 17 | 5 | 5 | 13.27 | |
| 19830-003 | 1 | 18 | 9 | 9 | 27.15 | |
| 19830-009 | 2 | 19 | 8 | 8 | 19.45 | |
| 19830-016 | 2 | 20 | 10 | 10 | 27.81 | |
| 19830-007 | 2 | 21 | 8 | 8 | 20.00 | |
| 19830-015 | 2 | 22 | 10 | 10 | 30.94 | |
| 19830-008 | 2 | 23 | 8 | 8 | 26.08 | |
| 19830-002 | 2 | 24 | 8 | 8 | 31.80 | |
| 19830-012 | 2 | 25 | 9 | 9 | 27.18 | |
| 19830-004 | 2 | 26 | 9 | 9 | 29.40 | |
| 19830-000 | 2 | 27 | 10 | 10 | 36.15 | |
| 19830-003 | 2 | 28 | 8 | 8 | 32.75 | |
| 19830-011 | 2 | 29 | 9 | 9 | 26.53 | |
| 19830-017 | 2 | 30 | 8 | 8 | 33.95 | |
| 19830-014 | 2 | 31 | 8 | 8 | 24.28 | |
| 19830-001 | 2 | 32 | 7 | 7 | 30.49 | |
| 19830-013 | 2 | 33 | 10 | 10 | 24.43 | |
| 19830-010 | 2 | 34 | 9 | 9 | 30.70 | |
| 19830-006 | 2 | 35 | 5 | 5 | 17.17 | |
| 19830-005 | 2 | 36 | 8 | 8 | 26.82 | |
| 19830-013 | 3 | 37 | 8 | 8 | 26.65 | |

# *Nereis virens* 28 Day Assay

**STUDY NUMBER:** 19875 **PROJECT:** Gowanus Canal Superfund Site

**DATE:** 08/05/10 **CLIENT:** HDR Engineering, Inc.

| Sample Code | Rep | Pos | # Survived | Pan Count | Weight | Initials |
|---|---|---|---|---|---|---|
| 19830-009 | 3 | 38 | 11 | 11 | 34.93 | JTP |
| 19830-017 | 3 | 39 | 9 | 9 | 33.85 | |
| 19830-016 | 3 | 40 | 8 | 8 | 23.40 | |
| 19830-000 | 3 | 41 | 9 | 9 | 26.97 | |
| 19830-010 | 3 | 42 | 7 | 7 | 25.78 | |
| 19830-008 | 3 | 43 | 9 | 9 | 27.47 | |
| 19830-014 | 3 | 44 | 8 | 8 | 26.73 | |
| 19830-004 | 3 | 45 | 10 | 10 | 33.90 | |
| 19830-006 | 3 | 46 | 8 | 8 | 23.40 | |
| 19830-005 | 3 | 47 | 8 | 8 | 28.69 | |
| 19830-011 | 3 | 48 | 8 | 8 | 29.43 | |
| 19830-002 | 3 | 49 | 10 | 10 | 44.08 | |
| 19830-012 | 3 | 50 | 9 | 9 | 17.77 | |
| 19830-001 | 3 | 51 | 9 | 9 | 27.82 | |
| 19830-003 | 3 | 52 | 9 | 9 | 24.78 | |
| 19830-007 | 3 | 53 | 9 | 9 | 21.31 | |
| 19830-015 | 3 | 54 | 10 | 10 | 31.80 | |
| 19830-006 | 4 | 55 | 7 | 7 | 17.07 | |
| 19830-011 | 4 | 56 | 10 | 10 | 32.71 | |
| 19830-012 | 4 | 57 | 10 | 10 | 26.64 | |
| 19830-010 | 4 | 58 | 9 | 9 | 31.43 | |
| 19830-015 | 4 | 59 | 10 | 10 | 32.05 | |
| 19830-009 | 4 | 60 | 10 | 10 | 36.66 | |
| 19830-001 | 4 | 61 | 8 | 8 | 31.15 | |
| 19830-016 | 4 | 62 | 8 | 8 | 24.84 | |
| 19830-008 | 4 | 63 | 8 | 8 | 36.27 | |
| 19830-004 | 4 | 64 | 8 | 8 | 27.49 | |
| 19830-007 | 4 | 65 | 9 | 9 | 22.46 | |
| 19830-014 | 4 | 66 | 10 | 10 | 35.14 | |
| 19830-000 | 4 | 67 | 10 | 10 | 30.86 | |
| 19830-017 | 4 | 68 | 8 | 8 | 26.32 | |
| 19830-013 | 4 | 69 | 9 | 9 | 28.53 | |
| 19830-002 | 4 | 70 | 10 | 10 | 30.92 | |
| 19830-005 | 4 | 71 | 4 | 4 | 13.95 | |
| 19830-003 | 4 | 72 | 9 | 9 | 28.31 | |
| 19830-016 | 5 | 73 | 8 | 8 | 25.92 | |
| 19830-003 | 5 | 74 | 8 | 8 | 31.81 | |

# *Nereis virens* 28 Day Assay

**STUDY NUMBER:** 19875 **PROJECT:** Gowanus Canal Superfund Site

**DATE:** 08/05/10 **CLIENT:** HDR Engineering, Inc.

| Sample Code | Rep | Pos | # Survived | Pan Count | Weight | Initials |
|---|---|---|---|---|---|---|
| 19830-000 | 5 | 75 | 10 | 10 | 29.20 | JTP |
| 19830-013 | 5 | 76 | 8 | 8 | 33.49 | |
| 19830-001 | 5 | 77 | 9 | 9 | 24.62 | |
| 19830-002 | 5 | 78 | 10 | 10 | 33.80 | |
| 19830-004 | 5 | 79 | 9 | 9 | 35.94 | |
| 19830-012 | 5 | 80 | 9 | 9 | 28.01 | |
| 19830-005 | 5 | 81 | 6 | 6 | 11.82 | |
| 19830-011 | 5 | 82 | 9 | 9 | 28.77 | |
| 19830-010 | 5 | 83 | 8 | 8 | 28.47 | |
| 19830-017 | 5 | 84 | 9 | 9 | 30.35 | |
| 19830-009 | 5 | 85 | 9 | 9 | 33.18 | |
| 19830-006 | 5 | 86 | 9 | 9 | 27.89 | |
| 19830-008 | 5 | 87 | 10 | 10 | 27.38 | |
| 19830-007 | 5 | 88 | 7 | 7 | 14.21 | |
| 19830-014 | 5 | 89 | 9 | 9 | 28.09 | |
| 19830-015 | 5 | 90 | 10 | 10 | 27.80 | |
| 19830-005 | 6 | 91 | 5 | 5 | 13.81 | |
| 19830-007 | 6 | 92 | 8 | 8 | 20.78 | |
| 19830-002 | 6 | 93 | 10 | 10 | 32.93 | |
| 19830-009 | 6 | 94 | 8 | 8 | 22.47 | |
| 19830-013 | 6 | 95 | 7 | 7 | 19.84 | |
| 19830-004 | 6 | 96 | 7 | 7 | 21.19 | |
| 19830-012 | 6 | 97 | 7 | 7 | 19.60 | |
| 19830-015 | 6 | 98 | 10 | 10 | 27.14 | |
| 19830-014 | 6 | 99 | 12 | 12 | 34.47 | |
| 19830-003 | 6 | 100 | 10 | 10 | 28.90 | |
| 19830-010 | 6 | 101 | 8 | 8 | 25.74 | |
| 19830-000 | 6 | 102 | 9 | 9 | 24.08 | |
| 19830-016 | 6 | 103 | 10 | 10 | 31.75 | |
| 19830-001 | 6 | 104 | 9 | 9 | 17.73 | |
| 19830-017 | 6 | 105 | 9 | 9 | 23.17 | |
| 19830-008 | 6 | 106 | 7 | 7 | 20.48 | |
| 19830-011 | 6 | 107 | 8 | 8 | 22.83 | |
| 19830-006 | 6 | 108 | 7 | 7 | 21.69 | |
| 19830-015 | 7 | 109 | 10 | 10 | 26.38 | |
| 19830-017 | 7 | 110 | 8 | 8 | 21.66 | |
| 19830-003 | 7 | 111 | 9 | 9 | 28.02 | |

# *Nereis virens* 28 Day Assay

**STUDY NUMBER:** 19875 **PROJECT:** Gowanus Canal Superfund Site

**DATE:** 08/05/10 **CLIENT:** HDR Engineering, Inc.

| Sample Code | Rep | Pos | # Survived | Pan Count | Weight | Initials |
|---|---|---|---|---|---|---|
| 19830-008 | 7 | 112 | 9 | 9 | 20.48 | JTP |
| 19830-006 | 7 | 113 | 7 | 7 | 21.20 | |
| 19830-012 | 7 | 114 | 7 | 7 | 17.45 | |
| 19830-004 | 7 | 115 | 5 | 5 | 12.47 | |
| 19830-011 | 7 | 116 | 10 | 10 | 20.06 | |
| 19830-014 | 7 | 117 | 9 | 9 | 23.70 | |
| 19830-005 | 7 | 118 | 5 | 5 | 13.95 | |
| 19830-001 | 7 | 119 | 10 | 10 | 30.35 | |
| 19830-000 | 7 | 120 | 11 | 11 | 33.45 | |
| 19830-009 | 7 | 121 | 7 | 7 | 21.05 | |
| 19830-010 | 7 | 122 | 10 | 10 | 29.77 | |
| 19830-007 | 7 | 123 | 5 | 5 | 13.74 | |
| 19830-002 | 7 | 124 | 9 | 9 | 27.47 | |
| 19830-013 | 7 | 125 | 10 | 10 | 30.79 | |
| 19830-016 | 7 | 126 | 9 | 9 | 26.18 | |
| 19830-017 | 8 | 127 | 8 | 8 | 21.34 | |
| 19830-013 | 8 | 128 | 9 | 9 | 32.15 | |
| 19830-010 | 8 | 129 | 8 | 8 | 23.81 | |
| 19830-007 | 8 | 130 | 6 | 6 | 17.16 | |
| 19830-011 | 8 | 131 | 6 | 6 | 22.12 | |
| 19830-002 | 8 | 132 | 8 | 8 | 28.40 | |
| 19830-004 | 8 | 133 | 10 | 10 | 25.95 | |
| 19830-003 | 8 | 134 | 6 | 6 | 20.05 | |
| 19830-005 | 8 | 135 | 9 | 9 | 27.01 | |
| 19830-012 | 8 | 136 | 8 | 8 | 20.60 | |
| 19830-006 | 8 | 137 | 8 | 8 | 25.62 | |
| 19830-001 | 8 | 138 | 8 | 8 | 24.18 | |
| 19830-014 | 8 | 139 | 10 | 10 | 24.39 | |
| 19830-000 | 8 | 140 | 10 | 10 | 22.89 | |
| 19830-009 | 8 | 141 | 8 | 8 | 24.90 | |
| 19830-008 | 8 | 142 | 7 | 7 | 18.36 | |
| 19830-015 | 8 | 143 | 8 | 8 | 23.88 | |
| 19830-016 | 8 | 144 | 8 | 8 | 23.48 | |

## *Nereis virens* 28 Day Assay

**Study Number:** 19830

**Client:** HDR Engineering, Inc.

**Project:** Gowanus Canal Superfund Site

| ESI SAMPLE ID | REP | WET WEIGHT (G) |
|---|---|---|
| Start Worms | A | 22 |
| | B | 30.1 |
| | C | 32.5 |
| | D | 26.4 |
| | E | 30.0 |
| RECORDED BY: DM | | |
| DATE: 7-8-10 1240 | | |

**NOTES:**

Number Worms per Replicate: 10

Average wet weight per worm: 2.82 Grams

Average wet weight per replicate: 28.2 Grams

Balance: AccuSeries Model 225D Serial#: 17008376

Alternate Balance: ID: Serial #:

# Aquatic Research Organisms

## DATA SHEET

CHAIN OF CUSTODY

I. Organism History

Species: Neries virens

Source: Lab reared_____ Hatchery reared_____ Field collected X

Collection date 7/7/10 Receipt date 7/7/10

Lot number 070710 Strain Wild

Brood Origination Damariscotta River, Boothbay Harbor, Maine

II. Water Quality

Temperature 15 °C Salinity 28-32 ppt DO Saturated

pH 7.8-8.2 Hardness N.A. ppm

III. Culture Conditions

System: Held at 4°C on moist seaweed

Diet: Flake Food_____ Phytoplankton_____ Trout Chow_____

Brine Shrimp_____ Rotifers_____ Other Not feed

Prophylactic Treatments:_____

Comments: Shipped on moistened seaweed, gel ice packs to keep cool.

IV. Shipping Information

Client: ESI # of Organisms: 2000

Carrier: PICK UP Date Shipped: 7/8/10

Tracking # N/A # of cartons_____

RELEASED BY: Stan Latsko DATE: TIME:

RECEIVED BY: DATE: TIME:

1 - 800 - 927 - 1650

PO Box 1271 • One Lafayette Road • Hampton, NH 03842 • (603) 926-1650

**Bioaccumulation Evaluation - Survival Endpoint** **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Sample Code | Sample ID | Sample Date | Receive Date | Sample Age | Client Name | Project |
|---|---|---|---|---|---|---|
| 19830-000 | 14-3755-5415 | 25 Jun-10 12:00 | 25 Jun-10 12:00 | 6d 0h | HDR Engineering, Inc. | Ecological Risk Assessme |
| 19830-003 | 01-9996-7487 | 17 Jun-10 13:38 | 19 Jun-10 13:00 | 13d 22h | | |
| 19830-008 | 03-2283-8752 | 18 Jun-10 09:48 | 19 Jun-10 13:00 | 13d 2h | | |
| 19830-009 | 12-1069-2908 | 18 Jun-10 12:52 | 19 Jun-10 13:00 | 12d 23h | | |
| 19830-010 | 00-6363-3797 | 18 Jun-10 11:21 | 19 Jun-10 13:00 | 13d 1h | | |
| 19830-012 | 01-9941-3387 | 18 Jun-10 15:16 | 19 Jun-10 13:00 | 12d 21h | | |
| 19830-001 | 10-6412-9845 | 17 Jun-10 14:25 | 19 Jun-10 13:00 | 13d 22h | | |
| 19830-002 | 14-2377-4629 | 17 Jun-10 16:50 | 19 Jun-10 13:00 | 13d 19h | | |
| 19830-004 | 02-9429-9959 | 18 Jun-10 10:15 | 19 Jun-10 13:00 | 13d 2h | | |
| 19830-005 | 09-3345-3845 | 18 Jun-10 10:30 | 19 Jun-10 13:00 | 13d 2h | | |
| 19830-006 | 05-3627-1272 | 18 Jun-10 13:15 | 19 Jun-10 13:00 | 12d 23h | | |
| 19830-007 | 20-4940-8825 | 18 Jun-10 12:40 | 19 Jun-10 13:00 | 12d 23h | | |
| 19830-011 | 15-0121-6600 | 18 Jun-10 15:55 | 19 Jun-10 13:00 | 12d 20h | | |
| 19830-013 | 12-2297-1777 | 21 Jun-10 12:50 | 22 Jun-10 15:00 | 9d 23h | | |
| 19830-014 | 07-7862-4227 | 21 Jun-10 14:05 | 22 Jun-10 15:00 | 9d 22h | | |
| 19830-015 | 19-3475-1966 | 22 Jun-10 10:40 | 23 Jun-10 09:30 | 9d 1h | | |
| 19830-016 | 00-4606-7422 | 22 Jun-10 14:35 | 23 Jun-10 09:30 | 8d 21h | | |
| 19830-017 | 19-8907-5507 | 24 Jun-10 09:50 | 25 Jun-10 09:30 | 7d 2h | | |

| Sample Code | Material Type | Sample Source | Station Location | Latitude | Longitude |
|---|---|---|---|---|---|
| 19830-000 | Marine Sediment | Gowanus Canal Superfund Site | Laboratory Control; 19830-000 | | |
| 19830-003 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD326-0.0-0.5; 19830-003 | | |
| 19830-008 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD328-0.0-0.5; 19830-008 | | |
| 19830-009 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD330-0.0-0.5; 19830-009 | | |
| 19830-010 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD333-0.0-0.5; 19830-010 | | |
| 19830-012 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD329-0.0-0.5; 19830-012 | | |
| 19830-001 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD303-0.0-0.5; 19830-001 | | |
| 19830-002 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD307A-0.0-0.5; 19830-002 | | |
| 19830-004 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD309-0.0-0.5; 19830-004 | | |
| 19830-005 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD313-0.0-0.5; 19830-005 | | |
| 19830-006 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD314-0.0-0.5; 19830-006 | | |
| 19830-007 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD315-0.0-0.5; 19830-007 | | |
| 19830-011 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD307B-0.0-0.5; 19830-011 | | |
| 19830-013 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD324-0.0-0.5; 19830-013 | | |
| 19830-014 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD321-0.0-0.5; 19830-014 | | |
| 19830-015 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD319-0.0-0.5; 19830-015 | | |
| 19830-016 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD318-0.0-0.5; 19830-016 | | |
| 19830-017 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD310-0.0-0.5; 19830-017 | | |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9577 | 0.9923 | 0.9 | 1 | 0.008452 | 0.04629 | 4.75% | 0.0% |
| 19830-003 | 8 | 0.85 | 0.8054 | 0.8946 | 0.6 | 1 | 0.02182 | 0.1195 | 14.06% | 12.82% |
| 19830-008 | 8 | 0.85 | 0.8054 | 0.8946 | 0.7 | 1 | 0.02182 | 0.1195 | 14.06% | 12.82% |
| 19830-009 | 8 | 0.875 | 0.8315 | 0.9185 | 0.7 | 1 | 0.02127 | 0.1165 | 13.31% | 10.26% |
| 19830-010 | 8 | 0.85 | 0.8154 | 0.8846 | 0.7 | 1 | 0.0169 | 0.09258 | 10.89% | 12.82% |
| 19830-012 | 8 | 0.85 | 0.8101 | 0.8899 | 0.7 | 1 | 0.01952 | 0.1069 | 12.58% | 12.82% |
| 19830-001 | 8 | 0.875 | 0.8363 | 0.9137 | 0.7 | 1 | 0.0189 | 0.1035 | 11.83% | 10.26% |
| 19830-002 | 8 | 0.9375 | 0.9033 | 0.9717 | 0.8 | 1 | 0.01673 | 0.09161 | 9.77% | 3.85% |
| 19830-004 | 8 | 0.85 | 0.7838 | 0.9162 | 0.5 | 1 | 0.03237 | 0.1773 | 20.86% | 12.82% |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-005 | 8 | 0.6125 | 0.5393 | 0.6857 | 0.4 | 0.9 | 0.03577 | 0.1959 | 31.99% | 37.18% |
| 19830-006 | 8 | 0.75 | 0.7011 | 0.7989 | 0.5 | 0.9 | 0.0239 | 0.1309 | 17.46% | 23.08% |
| 19830-007 | 8 | 0.7125 | 0.6512 | 0.7738 | 0.5 | 0.9 | 0.02998 | 0.1642 | 23.05% | 26.92% |
| 19830-011 | 8 | 0.875 | 0.8231 | 0.9269 | 0.6 | 1 | 0.02535 | 0.1389 | 15.87% | 10.26% |
| 19830-013 | 8 | 0.875 | 0.8363 | 0.9137 | 0.7 | 1 | 0.0189 | 0.1035 | 11.83% | 10.26% |
| 19830-014 | 8 | 0.925 | 0.8919 | 0.9581 | 0.8 | 1 | 0.01618 | 0.08864 | 9.58% | 5.13% |
| 19830-015 | 8 | 0.975 | 0.9486 | 1 | 0.8 | 1 | 0.01291 | 0.07071 | 7.25% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8283 | 0.8967 | 0.8 | 1 | 0.01673 | 0.09161 | 10.62% | 11.54% |
| 19830-017 | 8 | 0.8375 | 0.8182 | 0.8568 | 0.8 | 0.9 | 0.009449 | 0.05175 | 6.18% | 14.1% |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.678 | 2.995 | 2.289 | 3.615 | 0.07745 | 0.4242 | 14.95% | 0.0% |
| 19830-003 | 8 | 2.772 | 2.623 | 2.921 | 2.005 | 3.275 | 0.07292 | 0.3994 | 14.41% | 2.27% |
| 19830-008 | 8 | 2.582 | 2.361 | 2.803 | 1.836 | 3.627 | 0.108 | 0.5915 | 22.91% | 8.98% |
| 19830-009 | 8 | 2.689 | 2.456 | 2.922 | 1.945 | 3.666 | 0.1141 | 0.6247 | 23.23% | 5.21% |
| 19830-010 | 8 | 2.756 | 2.648 | 2.864 | 2.381 | 3.143 | 0.05285 | 0.2895 | 10.5% | 2.83% |
| 19830-012 | 8 | 2.251 | 2.09 | 2.411 | 1.745 | 2.801 | 0.0785 | 0.4299 | 19.1% | 20.65% |
| 19830-001 | 8 | 2.668 | 2.501 | 2.835 | 1.773 | 3.115 | 0.08167 | 0.4473 | 16.76% | 5.94% |
| 19830-002 | 8 | 3.212 | 3.011 | 3.414 | 2.747 | 4.408 | 0.09855 | 0.5398 | 16.8% | -13.25% |
| 19830-004 | 8 | 2.646 | 2.371 | 2.921 | 1.247 | 3.594 | 0.1345 | 0.7367 | 27.84% | 6.71% |
| 19830-005 | 8 | 1.879 | 1.608 | 2.151 | 1.182 | 2.869 | 0.1328 | 0.7274 | 38.7% | 33.74% |
| 19830-006 | 8 | 2.235 | 2.09 | 2.379 | 1.707 | 2.789 | 0.07058 | 0.3866 | 17.3% | 21.22% |
| 19830-007 | 8 | 1.787 | 1.647 | 1.926 | 1.327 | 2.246 | 0.06832 | 0.3742 | 20.95% | 37.02% |
| 19830-011 | 8 | 2.575 | 2.413 | 2.736 | 2.006 | 3.271 | 0.0789 | 0.4321 | 16.78% | 9.23% |
| 19830-013 | 8 | 2.815 | 2.649 | 2.98 | 1.984 | 3.349 | 0.08109 | 0.4441 | 15.78% | 0.78% |
| 19830-014 | 8 | 2.66 | 2.504 | 2.816 | 2.174 | 3.514 | 0.07621 | 0.4174 | 15.69% | 6.23% |
| 19830-015 | 8 | 2.762 | 2.615 | 2.909 | 2.096 | 3.205 | 0.0718 | 0.3933 | 14.24% | 2.64% |
| 19830-016 | 8 | 2.534 | 2.399 | 2.669 | 1.935 | 3.175 | 0.06604 | 0.3617 | 14.27% | 10.66% |
| 19830-017 | 8 | 2.668 | 2.47 | 2.867 | 2.134 | 3.395 | 0.09726 | 0.5327 | 19.96% | 5.93% |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.762 | 3.053 | 2.289 | 3.615 | 0.07131 | 0.3906 | 13.43% | 0.0% |
| 19830-003 | 8 | 3.291 | 3.108 | 3.475 | 2.753 | 4.094 | 0.08983 | 0.492 | 14.95% | -13.2% |
| 19830-008 | 8 | 3.052 | 2.801 | 3.302 | 2.276 | 4.534 | 0.1223 | 0.67 | 21.96% | -4.95% |
| 19830-009 | 8 | 3.056 | 2.885 | 3.228 | 2.431 | 3.687 | 0.08404 | 0.4603 | 15.06% | -5.12% |
| 19830-010 | 8 | 3.259 | 3.136 | 3.382 | 2.757 | 3.683 | 0.06018 | 0.3296 | 10.11% | -12.09% |
| 19830-012 | 8 | 2.647 | 2.515 | 2.779 | 1.974 | 3.112 | 0.06447 | 0.3531 | 13.34% | 8.97% |
| 19830-001 | 8 | 3.102 | 2.828 | 3.376 | 1.97 | 4.356 | 0.1341 | 0.7346 | 23.68% | -6.69% |
| 19830-002 | 8 | 3.439 | 3.239 | 3.638 | 2.76 | 4.408 | 0.09745 | 0.5338 | 15.52% | -18.27% |
| 19830-004 | 8 | 3.092 | 2.894 | 3.29 | 2.494 | 3.993 | 0.0968 | 0.5302 | 17.15% | -6.36% |
| 19830-005 | 8 | 3.066 | 2.858 | 3.274 | 1.97 | 3.586 | 0.1016 | 0.5563 | 18.14% | -5.45% |
| 19830-006 | 8 | 2.997 | 2.884 | 3.109 | 2.439 | 3.434 | 0.05495 | 0.301 | 10.04% | -3.07% |
| 19830-007 | 8 | 2.532 | 2.436 | 2.627 | 2.03 | 2.86 | 0.04653 | 0.2549 | 10.07% | 12.93% |
| 19830-011 | 8 | 2.999 | 2.777 | 3.221 | 2.006 | 3.687 | 0.1086 | 0.5946 | 19.83% | -3.15% |
| 19830-013 | 8 | 3.234 | 3.042 | 3.425 | 2.443 | 4.186 | 0.09372 | 0.5133 | 15.87% | -11.22% |
| 19830-014 | 8 | 2.891 | 2.721 | 3.061 | 2.174 | 3.514 | 0.08309 | 0.4551 | 15.74% | 0.56% |
| 19830-015 | 8 | 2.836 | 2.699 | 2.974 | 2.096 | 3.205 | 0.06719 | 0.368 | 12.97% | 2.44% |
| 19830-016 | 8 | 2.936 | 2.839 | 3.033 | 2.419 | 3.24 | 0.04734 | 0.2593 | 8.83% | -0.98% |
| 19830-017 | 8 | 3.184 | 2.962 | 3.406 | 2.574 | 4.244 | 0.1086 | 0.5948 | 18.68% | -9.51% |

**Bioaccumulation Evaluation - Survival Endpoint** **EnviroSystems, Inc.**

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 1 | 1 | 0.9 | 1 | 1 | 0.9 | 1 | 1 |
| 19830-003 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 1 | 0.9 | 0.6 |
| 19830-008 | 1 | 0.8 | 0.9 | 0.8 | 1 | 0.7 | 0.9 | 0.7 |
| 19830-009 | 1 | 0.8 | 1 | 1 | 0.9 | 0.8 | 0.7 | 0.8 |
| 19830-010 | 0.9 | 0.9 | 0.7 | 0.9 | 0.8 | 0.8 | 1 | 0.8 |
| 19830-012 | 0.9 | 0.9 | 0.9 | 1 | 0.9 | 0.7 | 0.7 | 0.8 |
| 19830-001 | 1 | 0.7 | 0.9 | 0.8 | 0.9 | 0.9 | 1 | 0.8 |
| 19830-002 | 1 | 0.8 | 1 | 1 | 1 | 1 | 0.9 | 0.8 |
| 19830-004 | 1 | 0.9 | 1 | 0.8 | 0.9 | 0.7 | 0.5 | 1 |
| 19830-005 | 0.4 | 0.8 | 0.8 | 0.4 | 0.6 | 0.5 | 0.5 | 0.9 |
| 19830-006 | 0.9 | 0.5 | 0.8 | 0.7 | 0.9 | 0.7 | 0.7 | 0.8 |
| 19830-007 | 0.5 | 0.8 | 0.9 | 0.9 | 0.7 | 0.8 | 0.5 | 0.6 |
| 19830-011 | 1 | 0.9 | 0.8 | 1 | 0.9 | 0.8 | 1 | 0.6 |
| 19830-013 | 0.9 | 1 | 0.8 | 0.9 | 0.8 | 0.7 | 1 | 0.9 |
| 19830-014 | 1 | 0.8 | 0.8 | 1 | 0.9 | 1 | 0.9 | 1 |
| 19830-015 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 |
| 19830-016 | 0.8 | 1 | 0.8 | 0.8 | 0.8 | 1 | 0.9 | 0.8 |
| 19830-017 | 0.8 | 0.8 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** **EnviroSystems, Inc.**

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.112 |
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.217 | 2.977 | 2.976 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |
| 19830-005 | 3.578 | 3.352 | 3.586 | 3.487 | 1.97 | 2.762 | 2.79 | 3.001 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.707 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-7047-9657 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 7.96% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 0.4648 | 1.761 | 0.1017 | 0.3246 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.014 | 2.586 | 0.5107 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.002883158 | 0.002883158 | 1 | 0.216 | 0.6492 | Non-Significant Effect |
| Error | 0.1868688 | 0.01334777 | 14 | | | |
| Total | 0.189752 | 0.01623093 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.95 | 8.885 | 0.0904 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9166 | | 0.1489 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-017 | 8 | 0.8375 | 0.8178 | 0.8572 | 0.8 | 0.9 | 0.009611 | 0.05176 | 6.18% | 1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-017 | 8 | 1.16 | 1.132 | 1.188 | 1.107 | 1.249 | 0.01364 | 0.07344 | 6.33% | 2.26% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-017 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-5575-3935 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | -0.1949 | 1.761 | 0.1255 | 0.5759 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.632 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.000772291 | 0.000772291 | 1 | 0.038 | 0.8482 | Non-Significant Effect |
| Error | 0.2845204 | 0.02032288 | 14 | | | |
| Total | 0.2852927 | 0.02109518 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.101 | 8.885 | 0.9020 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8919 | | 0.0596 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.8 | 1 | 0.01701 | 0.09161 | 10.62% | -1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-016 | 8 | 1.201 | 1.148 | 1.254 | 1.107 | 1.412 | 0.02583 | 0.1391 | 11.58% | -1.17% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-016 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-7229-4220 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.06% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 91 | | 2 | 0.9926 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.152 | 2.586 | 0.3214 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1394276 | 0.1394276 | 1 | 8.471 | 0.0114 | Significant Effect |
| Error | 0.2304422 | 0.01646016 | 14 | | | |
| Total | 0.3698699 | 0.1558878 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.834 | 8.885 | 0.4423 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.7997 | | 0.0027 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-015 | 8 | 0.975 | 0.9481 | 1 | 0.8 | 1 | 0.01313 | 0.07071 | 7.25% | -14.71% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-015 | 8 | 1.374 | 1.333 | 1.415 | 1.107 | 1.412 | 0.02002 | 0.1078 | 7.85% | -15.73% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4420-4727 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.25% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | -1.544 | 1.761 | 0.125 | 0.9276 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.639 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04804086 | 0.04804086 | 1 | 2.384 | 0.1449 | Non-Significant Effect |
| Error | 0.282117 | 0.02015121 | 14 | | | |
| Total | 0.3301578 | 0.06819208 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.121 | 8.885 | 0.8839 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8915 | | 0.0589 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-014 | 8 | 0.925 | 0.8913 | 0.9587 | 0.8 | 1 | 0.01646 | 0.08864 | 9.58% | -8.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-014 | 8 | 1.297 | 1.244 | 1.349 | 1.107 | 1.426 | 0.0256 | 0.1378 | 10.63% | -9.23% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-014 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-6941-3255 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.71% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | -0.4739 | 1.761 | 0.1296 | 0.6786 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.624 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004863754 | 0.004863754 | 1 | 0.2246 | 0.6429 | Non-Significant Effect |
| Error | 0.3031931 | 0.02165665 | 14 | | | |
| Total | 0.3080568 | 0.0265204 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.033 | 8.885 | 0.9667 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9295 | | 0.2394 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-013 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-013 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -2.94% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-013 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-1507-6766 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.63% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | -0.4997 | 1.761 | 0.1484 | 0.6875 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.108 | 2.586 | 0.3749 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.007091886 | 0.007091886 | 1 | 0.2497 | 0.6251 | Non-Significant Effect |
| Error | 0.3976953 | 0.0284068 | 14 | | | |
| Total | 0.4047872 | 0.03549869 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.667 | 8.885 | 0.5163 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9374 | | 0.3188 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-011 | 8 | 0.875 | 0.8222 | 0.9278 | 0.6 | 1 | 0.02579 | 0.1389 | 15.87% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-011 | 8 | 1.229 | 1.158 | 1.301 | 0.8861 | 1.412 | 0.03499 | 0.1884 | 15.33% | -3.55% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-011 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4800-2112 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.63% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 1.983 | 1.761 | 0.1485 | 0.0337 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.44 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1117635 | 0.1117635 | 1 | 3.931 | 0.0674 | Non-Significant Effect |
| Error | 0.3980732 | 0.0284338 | 14 | | | |
| Total | 0.5098367 | 0.1401973 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.67 | 8.885 | 0.5151 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9031 | | 0.0901 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-007 | 8 | 0.7125 | 0.65 | 0.775 | 0.5 | 0.9 | 0.03049 | 0.1642 | 23.05% | 16.18% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-007 | 8 | 1.02 | 0.9483 | 1.092 | 0.7854 | 1.249 | 0.03502 | 0.1886 | 18.49% | 14.08% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-007 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-8321-2532 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.95% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | 1.712 | 1.761 | 0.132 | 0.0545 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.888 | 2.586 | 0.7478 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0658441 | 0.0658441 | 1 | 2.93 | 0.1090 | Non-Significant Effect |
| Error | 0.3146536 | 0.02247526 | 14 | | | |
| Total | 0.3804977 | 0.08831935 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.11 | 8.885 | 0.8939 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9381 | | 0.3266 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-006 | 8 | 0.75 | 0.7002 | 0.7998 | 0.5 | 0.9 | 0.02431 | 0.1309 | 17.46% | 11.76% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-006 | 8 | 1.059 | 1 | 1.117 | 0.7854 | 1.249 | 0.02856 | 0.1538 | 14.52% | 10.81% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-006 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-1042-5715 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.05% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 2.997 | 1.761 | 0.1622 | 0.0048 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.899 | 2.586 | 0.7259 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3047056 | 0.3047056 | 1 | 8.982 | 0.0096 | Significant Effect |
| Error | 0.4749182 | 0.03392272 | 14 | | | |
| Total | 0.7796238 | 0.3386284 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.185 | 8.885 | 0.3242 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9305 | | 0.2484 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-005 | 8 | 0.6125 | 0.538 | 0.687 | 0.4 | 0.9 | 0.03639 | 0.1959 | 31.99% | 27.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-005 | 8 | 0.9112 | 0.8291 | 0.9933 | 0.6847 | 1.249 | 0.04006 | 0.2157 | 23.68% | 23.25% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-005 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-7101-3472 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.77% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | -0.1662 | 1.761 | 0.1691 | 0.5648 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.252 | 2.586 | 0.2221 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001018086 | 0.001018086 | 1 | 0.02762 | 0.8704 | Non-Significant Effect |
| Error | 0.5160447 | 0.03686034 | 14 | | | |
| Total | 0.5170628 | 0.03787842 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.461 | 8.885 | 0.2578 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9085 | | 0.1100 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-004 | 8 | 0.85 | 0.7826 | 0.9174 | 0.5 | 1 | 0.03292 | 0.1773 | 20.86% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-004 | 8 | 1.203 | 1.116 | 1.29 | 0.7854 | 1.419 | 0.04252 | 0.229 | 19.03% | -1.34% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-004 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-4388-9437 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.36% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | -1.791 | 1.761 | 0.1261 | 0.9526 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.625 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06576182 | 0.06576182 | 1 | 3.209 | 0.0949 | Non-Significant Effect |
| Error | 0.2869296 | 0.02049497 | 14 | | | |
| Total | 0.3526914 | 0.08625679 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.082 | 8.885 | 0.9199 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8427 | | 0.0106 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-002 | 8 | 0.9375 | 0.9027 | 0.9723 | 0.8 | 1 | 0.01701 | 0.09161 | 9.77% | -10.29% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-002 | 8 | 1.315 | 1.262 | 1.369 | 1.107 | 1.412 | 0.02606 | 0.1403 | 10.67% | -10.8% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-002 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-1346-4255 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.71% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | -0.4739 | 1.761 | 0.1296 | 0.6786 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.624 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004863754 | 0.004863754 | 1 | 0.2246 | 0.6429 | Non-Significant Effect |
| Error | 0.3031931 | 0.02165665 | 14 | | | |
| Total | 0.3080568 | 0.0265204 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.033 | 8.885 | 0.9667 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9295 | | 0.2394 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |
| 19830-001 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.0% |
| 19830-001 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -2.94% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | | | | | | | |
| 19830-001 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-0848-4553 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 7.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 0.4454 | 1.761 | 0.09336 | 0.3314 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.227 | 2.586 | 0.2449 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.002229617 | 0.002229617 | 1 | 0.1984 | 0.6628 | Non-Significant Effect |
| Error | 0.1573438 | 0.01123885 | 14 | | | |
| Total | 0.1595735 | 0.01346846 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.168 | 8.885 | 0.1512 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9037 | | 0.0921 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-017 | 8 | 0.8375 | 0.8178 | 0.8572 | 0.8 | 0.9 | 0.009611 | 0.05176 | 6.18% | 1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-017 | 8 | 1.16 | 1.132 | 1.188 | 1.107 | 1.249 | 0.01364 | 0.07344 | 6.33% | 1.99% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-017 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-7726-6261 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.96% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | -0.2539 | 1.761 | 0.1189 | 0.5984 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.749 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001174183 | 0.001174183 | 1 | 0.06447 | 0.8033 | Non-Significant Effect |
| Error | 0.2549954 | 0.01821395 | 14 | | | |
| Total | 0.2561696 | 0.01938814 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.132 | 8.885 | 0.8741 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8559 | | 0.0167 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.8 | 1 | 0.01701 | 0.09161 | 10.62% | -1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-016 | 8 | 1.201 | 1.148 | 1.254 | 1.107 | 1.412 | 0.02583 | 0.1391 | 11.58% | -1.45% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-016 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-1582-0124 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 8.64% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | -3.171 | 1.761 | 0.1055 | 0.9966 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.305 | 2.586 | 0.1806 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.144306 | 0.144306 | 1 | 10.06 | 0.0068 | Significant Effect |
| Error | 0.2009172 | 0.01435123 | 14 | | | |
| Total | 0.3452233 | 0.1586573 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.471 | 8.885 | 0.6236 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.857 | | 0.0173 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-015 | 8 | 0.975 | 0.9481 | 1 | 0.8 | 1 | 0.01313 | 0.07071 | 7.25% | -14.71% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-015 | 8 | 1.374 | 1.333 | 1.415 | 1.107 | 1.412 | 0.02002 | 0.1078 | 7.85% | -16.04% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-7258-7097 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | -1.68 | 1.761 | 0.1183 | 0.9424 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.757 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.05092176 | 0.05092176 | 1 | 2.822 | 0.1151 | Non-Significant Effect |
| Error | 0.252592 | 0.01804228 | 14 | | | |
| Total | 0.3035138 | 0.06896404 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.112 | 8.885 | 0.8921 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9225 | | 0.1852 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-014 | 8 | 0.925 | 0.8913 | 0.9587 | 0.8 | 1 | 0.01646 | 0.08864 | 9.58% | -8.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-014 | 8 | 1.297 | 1.244 | 1.349 | 1.107 | 1.426 | 0.0256 | 0.1378 | 10.63% | -9.53% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-014 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-9114-6882 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.39% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | -0.5451 | 1.761 | 0.1231 | 0.7029 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.71 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.005809008 | 0.005809008 | 1 | 0.2972 | 0.5942 | Non-Significant Effect |
| Error | 0.2736681 | 0.01954772 | 14 | | | |
| Total | 0.2794771 | 0.02535673 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.288 | 8.885 | 0.7467 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9531 | | 0.5398 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-013 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-013 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -3.22% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-013 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-8953-4048 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.38% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | -0.5592 | 1.761 | 0.1428 | 0.7076 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.191 | 2.586 | 0.2797 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.008224598 | 0.008224598 | 1 | 0.3127 | 0.5848 | Non-Significant Effect |
| Error | 0.3681703 | 0.02629788 | 14 | | | |
| Total | 0.3763949 | 0.03452247 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.079 | 8.885 | 0.3553 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9506 | | 0.4986 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-011 | 8 | 0.875 | 0.8222 | 0.9278 | 0.6 | 1 | 0.02579 | 0.1389 | 15.87% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-011 | 8 | 1.229 | 1.158 | 1.301 | 0.8861 | 1.412 | 0.03499 | 0.1884 | 15.33% | -3.83% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-011 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1769-3888 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.39% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 2.021 | 1.761 | 0.1429 | 0.0314 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.497 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1074753 | 0.1074753 | 1 | 4.083 | 0.0629 | Non-Significant Effect |
| Error | 0.3685482 | 0.02632487 | 14 | | | |
| Total | 0.4760235 | 0.1338002 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.082 | 8.885 | 0.3543 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9259 | | 0.2097 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-007 | 8 | 0.7125 | 0.65 | 0.775 | 0.5 | 0.9 | 0.03049 | 0.1642 | 23.05% | 16.18% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-007 | 8 | 1.02 | 0.9483 | 1.092 | 0.7854 | 1.249 | 0.03502 | 0.1886 | 18.49% | 13.84% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-007 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-0304-9043 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.64% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 1.753 | 1.761 | 0.1257 | 0.0508 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.984 | 2.586 | 0.5618 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06256242 | 0.06256242 | 1 | 3.072 | 0.1015 | Non-Significant Effect |
| Error | 0.2851286 | 0.02036633 | 14 | | | |
| Total | 0.3476911 | 0.08292875 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.384 | 8.885 | 0.6787 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9392 | | 0.3389 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-006 | 8 | 0.75 | 0.7002 | 0.7998 | 0.5 | 0.9 | 0.02431 | 0.1309 | 17.46% | 11.76% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-006 | 8 | 1.059 | 1 | 1.117 | 0.7854 | 1.249 | 0.02856 | 0.1538 | 14.52% | 10.56% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-006 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-5964-5729 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 13.86% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 3.058 | 1.761 | 0.1571 | 0.0043 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.961 | 2.586 | 0.6035 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2975978 | 0.2975978 | 1 | 9.354 | 0.0085 | Significant Effect |
| Error | 0.4453932 | 0.0318138 | 14 | | | |
| Total | 0.742991 | 0.3294116 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.724 | 8.885 | 0.2095 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9386 | | 0.3325 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-005 | 8 | 0.6125 | 0.538 | 0.687 | 0.4 | 0.9 | 0.03639 | 0.1959 | 31.99% | 27.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-005 | 8 | 0.9112 | 0.8291 | 0.9933 | 0.6847 | 1.249 | 0.04006 | 0.2157 | 23.68% | 23.04% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-005 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-6274-8868 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | -0.2059 | 1.761 | 0.1642 | 0.5801 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.32 | 2.586 | 0.1702 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001473308 | 0.001473308 | 1 | 0.0424 | 0.8398 | Non-Significant Effect |
| Error | 0.4865198 | 0.03475141 | 14 | | | |
| Total | 0.4879931 | 0.03622472 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.068 | 8.885 | 0.1623 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9254 | | 0.2060 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-004 | 8 | 0.85 | 0.7826 | 0.9174 | 0.5 | 1 | 0.03292 | 0.1773 | 20.86% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-004 | 8 | 1.203 | 1.116 | 1.29 | 0.7854 | 1.419 | 0.04252 | 0.229 | 19.03% | -1.62% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-004 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-3875-1637 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.01% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | -1.939 | 1.761 | 0.1194 | 0.9635 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.741 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06912529 | 0.06912529 | 1 | 3.76 | 0.0729 | Non-Significant Effect |
| Error | 0.2574046 | 0.01838604 | 14 | | | |
| Total | 0.3265299 | 0.08751134 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.152 | 8.885 | 0.8564 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.887 | | 0.0499 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-002 | 8 | 0.9375 | 0.9027 | 0.9723 | 0.8 | 1 | 0.01701 | 0.09161 | 9.77% | -10.29% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-002 | 8 | 1.315 | 1.262 | 1.369 | 1.107 | 1.412 | 0.02606 | 0.1403 | 10.67% | -11.1% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-002 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-1332-6941 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:53 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.39% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | -0.5451 | 1.761 | 0.1231 | 0.7029 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.71 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.005809008 | 0.005809008 | 1 | 0.2972 | 0.5942 | Non-Significant Effect |
| Error | 0.2736681 | 0.01954772 | 14 | | | |
| Total | 0.2794771 | 0.02535673 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.288 | 8.885 | 0.7467 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9531 | | 0.5398 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-001 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-001 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -3.22% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-001 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-2438-8054 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.27% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | -0.04675 | 1.761 | 0.122 | 0.5183 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.704 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 4.194157E-05 | 4.194157E-05 | 1 | 0.002185 | 0.9634 | Non-Significant Effect |
| Error | 0.2687073 | 0.01919338 | 14 | | | |
| Total | 0.2687492 | 0.01923532 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.247 | 8.885 | 0.7784 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8892 | | 0.0541 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.0% |
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | -0.27% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | | | | | | | |
| 19830-012 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-4568-4767 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 8.33% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 0.9922 | 1.761 | 0.1159 | 0.1690 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.844 | 2.586 | 0.8476 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01704745 | 0.01704745 | 1 | 0.9844 | 0.3380 | Non-Significant Effect |
| Error | 0.2424433 | 0.01731738 | 14 | | | |
| Total | 0.2594907 | 0.03436483 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.422 | 8.885 | 0.0403 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9236 | | 0.1927 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-017 | 8 | 0.8375 | 0.8178 | 0.8572 | 0.8 | 0.9 | 0.009611 | 0.05176 | 6.18% | 4.29% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-017 | 8 | 1.16 | 1.132 | 1.188 | 1.107 | 1.249 | 0.01364 | 0.07344 | 6.33% | 5.33% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-017 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-6081-5464 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.31% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 66 | | 3 | 0.4392 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.557 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.002408916 | 0.002408916 | 1 | 0.09916 | 0.7575 | Non-Significant Effect |
| Error | 0.3400948 | 0.02429249 | 14 | | | |
| Total | 0.3425037 | 0.0267014 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.512 | 8.885 | 0.5991 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.836 | | 0.0085 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.8 | 1 | 0.01701 | 0.09161 | 10.62% | 1.43% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-016 | 8 | 1.201 | 1.148 | 1.254 | 1.107 | 1.412 | 0.02583 | 0.1391 | 11.58% | 2.0% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-016 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3353-5412 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.25% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | -2.075 | 1.761 | 0.1259 | 0.9715 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.932 | 2.586 | 0.6582 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.08792961 | 0.08792961 | 1 | 4.304 | 0.0569 | Non-Significant Effect |
| Error | 0.2860167 | 0.02042976 | 14 | | | |
| Total | 0.3739463 | 0.1083594 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.517 | 8.885 | 0.2464 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8835 | | 0.0441 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-015 | 8 | 0.975 | 0.9481 | 1 | 0.8 | 1 | 0.01313 | 0.07071 | 7.25% | -11.43% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-015 | 8 | 1.374 | 1.333 | 1.415 | 1.107 | 1.412 | 0.02002 | 0.1078 | 7.85% | -12.1% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-3591-5638 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.27% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | -0.9163 | 1.761 | 0.1368 | 0.8125 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.563 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02025254 | 0.02025254 | 1 | 0.8396 | 0.3750 | Non-Significant Effect |
| Error | 0.3376915 | 0.02412082 | 14 | | | |
| Total | 0.357944 | 0.04437336 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.539 | 8.885 | 0.5834 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9005 | | 0.0820 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-014 | 8 | 0.925 | 0.8913 | 0.9587 | 0.8 | 1 | 0.01646 | 0.08864 | 9.58% | -5.71% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-014 | 8 | 1.297 | 1.244 | 1.349 | 1.107 | 1.426 | 0.0256 | 0.1378 | 10.63% | -5.81% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-014 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-4633-4394 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | 0.04454 | 1.761 | 0.141 | 0.4826 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.516 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 5.083998E-05 | 5.083998E-05 | 1 | 0.001984 | 0.9651 | Non-Significant Effect |
| Error | 0.3587675 | 0.02562625 | 14 | | | |
| Total | 0.3588184 | 0.02567709 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.328 | 8.885 | 0.7173 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8704 | | 0.0276 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-013 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-013 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | 0.29% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-013 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-9646-9507 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.33% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | -0.04081 | 1.761 | 0.1585 | 0.5160 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.975 | 2.586 | 0.5782 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 5.391236E-05 | 5.391236E-05 | 1 | 0.001665 | 0.9680 | Non-Significant Effect |
| Error | 0.4532697 | 0.03237641 | 14 | | | |
| Total | 0.4533236 | 0.03243032 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.214 | 8.885 | 0.8043 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8736 | | 0.0308 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-011 | 8 | 0.875 | 0.8222 | 0.9278 | 0.6 | 1 | 0.02579 | 0.1389 | 15.87% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-011 | 8 | 1.229 | 1.158 | 1.301 | 0.8861 | 1.412 | 0.03499 | 0.1884 | 15.33% | -0.3% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-011 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-5403-0334 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.34% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-007 | 2.284 | 1.761 | 0.1585 | 0.0192 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.349 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1690701 | 0.1690701 | 1 | 5.218 | 0.0385 | Significant Effect |
| Error | 0.4536476 | 0.0324034 | 14 | | | |
| Total | 0.6227177 | 0.2014735 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.216 | 8.885 | 0.8028 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.889 | | 0.0538 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-007 | 8 | 0.7125 | 0.65 | 0.775 | 0.5 | 0.9 | 0.03049 | 0.1642 | 23.05% | 18.57% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-007 | 8 | 1.02 | 0.9483 | 1.092 | 0.7854 | 1.249 | 0.03502 | 0.1886 | 18.49% | 16.77% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-007 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-9524-2248 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.87% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-006 | 2.051 | 1.761 | 0.1432 | 0.0298 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.741 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1112035 | 0.1112035 | 1 | 4.205 | 0.0595 | Non-Significant Effect |
| Error | 0.3702281 | 0.02644486 | 14 | | | |
| Total | 0.4814315 | 0.1376484 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.237 | 8.885 | 0.7866 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9005 | | 0.0818 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-006 | 8 | 0.75 | 0.7002 | 0.7998 | 0.5 | 0.9 | 0.02431 | 0.1309 | 17.46% | 14.29% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-006 | 8 | 1.059 | 1 | 1.117 | 0.7854 | 1.249 | 0.02856 | 0.1538 | 14.52% | 13.6% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-006 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-1617-5162 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 13.59% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 3.231 | 1.761 | 0.1714 | 0.0030 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.796 | 2.586 | 0.9673 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3954804 | 0.3954804 | 1 | 10.44 | 0.0060 | Significant Effect |
| Error | 0.5304926 | 0.03789233 | 14 | | | |
| Total | 0.9259731 | 0.4333728 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.592 | 8.885 | 0.5546 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8791 | | 0.0375 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-005 | 8 | 0.6125 | 0.538 | 0.687 | 0.4 | 0.9 | 0.03639 | 0.1959 | 31.99% | 30.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-005 | 8 | 0.9112 | 0.8291 | 0.9933 | 0.6847 | 1.249 | 0.04006 | 0.2157 | 23.68% | 25.65% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-005 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2466-4452 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.24% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 0.2225 | 1.761 | 0.1779 | 0.4136 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.14 | 2.586 | 0.3355 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.002021705 | 0.002021705 | 1 | 0.04952 | 0.8271 | Non-Significant Effect |
| Error | 0.5716192 | 0.04082994 | 14 | | | |
| Total | 0.5736409 | 0.04285165 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.793 | 8.885 | 0.4592 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8987 | | 0.0766 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-004 | 8 | 0.85 | 0.7826 | 0.9174 | 0.5 | 1 | 0.03292 | 0.1773 | 20.86% | 2.86% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-004 | 8 | 1.203 | 1.116 | 1.29 | 0.7854 | 1.419 | 0.04252 | 0.229 | 19.03% | 1.83% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-004 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-8664-4429 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.36% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | -1.148 | 1.761 | 0.1377 | 0.8649 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.552 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03224533 | 0.03224533 | 1 | 1.318 | 0.2702 | Non-Significant Effect |
| Error | 0.342504 | 0.02446457 | 14 | | | |
| Total | 0.3747494 | 0.0567099 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.485 | 8.885 | 0.6146 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8878 | | 0.0514 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-002 | 8 | 0.9375 | 0.9027 | 0.9723 | 0.8 | 1 | 0.01701 | 0.09161 | 9.77% | -7.14% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-002 | 8 | 1.315 | 1.262 | 1.369 | 1.107 | 1.412 | 0.02606 | 0.1403 | 10.67% | -7.33% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-002 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-7075-1045 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 0.04454 | 1.761 | 0.141 | 0.4826 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.516 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 5.083998E-05 | 5.083998E-05 | 1 | 0.001984 | 0.9651 | Non-Significant Effect |
| Error | 0.3587675 | 0.02562625 | 14 | | | |
| Total | 0.3588184 | 0.02567709 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.328 | 8.885 | 0.7173 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8704 | | 0.0276 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-001 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-001 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | 0.29% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-001 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3665-5263 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:52 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.57% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 0.4836 | 1.761 | 0.14 | 0.3181 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.527 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.005909125 | 0.005909125 | 1 | 0.2338 | 0.6362 | Non-Significant Effect |
| Error | 0.3538067 | 0.02527191 | 14 | | | |
| Total | 0.3597158 | 0.03118103 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.373 | 8.885 | 0.6865 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9163 | | 0.1471 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 2.86% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 3.14% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-012 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-5668-7823 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.01% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | 0.5476 | 1.761 | 0.134 | 0.2963 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.595 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.006946733 | 0.006946733 | 1 | 0.2999 | 0.5926 | Non-Significant Effect |
| Error | 0.3242817 | 0.02316298 | 14 | | | |
| Total | 0.3312285 | 0.03010971 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.712 | 8.885 | 0.4951 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.927 | | 0.2181 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 0.0% |
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 2.86% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 0.0% |
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 3.4% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | | | | | | | |
| 19830-010 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-0966-0171 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 8.93% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 0.454 | 1.761 | 0.1144 | 0.3284 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.771 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.003476679 | 0.003476679 | 1 | 0.2061 | 0.6568 | Non-Significant Effect |
| Error | 0.2361137 | 0.01686526 | 14 | | | |
| Total | 0.2395904 | 0.02034194 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.254 | 8.885 | 0.0438 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9209 | | 0.1744 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-017 | 8 | 0.8375 | 0.8178 | 0.8572 | 0.8 | 0.9 | 0.009611 | 0.05176 | 6.18% | 1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-017 | 8 | 1.16 | 1.132 | 1.188 | 1.107 | 1.249 | 0.01364 | 0.07344 | 6.33% | 2.48% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-017 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-3200-9860 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.09% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | -0.1459 | 1.761 | 0.136 | 0.5569 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.489 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0005072316 | 0.0005072316 | 1 | 0.02128 | 0.8861 | Non-Significant Effect |
| Error | 0.3337652 | 0.02384037 | 14 | | | |
| Total | 0.3342724 | 0.02434761 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.465 | 8.885 | 0.6269 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8519 | | 0.0145 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.8 | 1 | 0.01701 | 0.09161 | 10.62% | -1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-016 | 8 | 1.201 | 1.148 | 1.254 | 1.107 | 1.412 | 0.02583 | 0.1391 | 11.58% | -0.95% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-016 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-5356-2607 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.93% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | -2.605 | 1.761 | 0.1245 | 0.9896 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.954 | 2.586 | 0.6165 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.135521 | 0.135521 | 1 | 6.784 | 0.0208 | Significant Effect |
| Error | 0.2796871 | 0.01997765 | 14 | | | |
| Total | 0.4152081 | 0.1554987 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.439 | 8.885 | 0.2623 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8786 | | 0.0369 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-015 | 8 | 0.975 | 0.9481 | 1 | 0.8 | 1 | 0.01313 | 0.07071 | 7.25% | -14.71% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-015 | 8 | 1.374 | 1.333 | 1.415 | 1.107 | 1.412 | 0.02002 | 0.1078 | 7.85% | -15.47% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-3147-7395 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.04% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | -1.39 | 1.761 | 0.1355 | 0.9069 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.495 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04575917 | 0.04575917 | 1 | 1.933 | 0.1861 | Non-Significant Effect |
| Error | 0.3313619 | 0.0236687 | 14 | | | |
| Total | 0.377121 | 0.06942788 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.491 | 8.885 | 0.6110 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9054 | | 0.0983 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-014 | 8 | 0.925 | 0.8913 | 0.9587 | 0.8 | 1 | 0.01646 | 0.08864 | 9.58% | -8.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-014 | 8 | 1.297 | 1.244 | 1.349 | 1.107 | 1.426 | 0.0256 | 0.1378 | 10.63% | -8.99% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-014 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-6038-7362 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.47% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | -0.4063 | 1.761 | 0.1397 | 0.6547 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.506 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004156677 | 0.004156677 | 1 | 0.1651 | 0.6906 | Non-Significant Effect |
| Error | 0.3524379 | 0.02517414 | 14 | | | |
| Total | 0.3565946 | 0.02933081 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.287 | 8.885 | 0.7474 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9237 | | 0.1937 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-013 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-013 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -2.71% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-013 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-0631-6523 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 13.28% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | -0.4418 | 1.761 | 0.1573 | 0.6673 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.988 | 2.586 | 0.5538 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.006232316 | 0.006232316 | 1 | 0.1952 | 0.6654 | Non-Significant Effect |
| Error | 0.4469401 | 0.0319243 | 14 | | | |
| Total | 0.4531724 | 0.03815661 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.253 | 8.885 | 0.7735 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9349 | | 0.2907 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-011 | 8 | 0.875 | 0.8222 | 0.9278 | 0.6 | 1 | 0.02579 | 0.1389 | 15.87% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-011 | 8 | 1.229 | 1.158 | 1.301 | 0.8861 | 1.412 | 0.03499 | 0.1884 | 15.33% | -3.32% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-011 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-9804-8579 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 13.28% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 1.9 | 1.761 | 0.1574 | 0.0391 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.359 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1153138 | 0.1153138 | 1 | 3.609 | 0.0783 | Non-Significant Effect |
| Error | 0.447318 | 0.03195129 | 14 | | | |
| Total | 0.5626318 | 0.1472651 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.255 | 8.885 | 0.7720 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8982 | | 0.0752 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-007 | 8 | 0.7125 | 0.65 | 0.775 | 0.5 | 0.9 | 0.03049 | 0.1642 | 23.05% | 16.18% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-007 | 8 | 1.02 | 0.9483 | 1.092 | 0.7854 | 1.249 | 0.03502 | 0.1886 | 18.49% | 14.27% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-007 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-0972-1197 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | 1.624 | 1.761 | 0.142 | 0.0633 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.756 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06857557 | 0.06857557 | 1 | 2.638 | 0.1266 | Non-Significant Effect |
| Error | 0.3638985 | 0.02599275 | 14 | | | |
| Total | 0.432474 | 0.09456831 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.198 | 8.885 | 0.8175 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9322 | | 0.2641 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-006 | 8 | 0.75 | 0.7002 | 0.7998 | 0.5 | 0.9 | 0.02431 | 0.1309 | 17.46% | 11.76% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-006 | 8 | 1.059 | 1 | 1.117 | 0.7854 | 1.249 | 0.02856 | 0.1538 | 14.52% | 11.0% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-006 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-5732-7985 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.64% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 2.88 | 1.761 | 0.1704 | 0.0061 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.807 | 2.586 | 0.9393 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3105496 | 0.3105496 | 1 | 8.295 | 0.0121 | Significant Effect |
| Error | 0.524163 | 0.03744021 | 14 | | | |
| Total | 0.8347126 | 0.3479899 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.642 | 8.885 | 0.5284 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.909 | | 0.1120 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-005 | 8 | 0.6125 | 0.538 | 0.687 | 0.4 | 0.9 | 0.03639 | 0.1959 | 31.99% | 27.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-005 | 8 | 0.9112 | 0.8291 | 0.9933 | 0.6847 | 1.249 | 0.04006 | 0.2157 | 23.68% | 23.42% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-005 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-5221-7470 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 15.33% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | -0.1326 | 1.761 | 0.177 | 0.5518 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.152 | 2.586 | 0.3216 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0007096436 | 0.0007096436 | 1 | 0.01758 | 0.8964 | Non-Significant Effect |
| Error | 0.5652896 | 0.04037783 | 14 | | | |
| Total | 0.5659993 | 0.04108747 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.85 | 8.885 | 0.4358 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.909 | | 0.1120 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-004 | 8 | 0.85 | 0.7826 | 0.9174 | 0.5 | 1 | 0.03292 | 0.1773 | 20.86% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-004 | 8 | 1.203 | 1.116 | 1.29 | 0.7854 | 1.419 | 0.04252 | 0.229 | 19.03% | -1.12% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-004 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-6330-9625 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:51 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.14% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | -1.621 | 1.761 | 0.1365 | 0.9363 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.484 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06308755 | 0.06308755 | 1 | 2.627 | 0.1273 | Non-Significant Effect |
| Error | 0.3361744 | 0.02401246 | 14 | | | |
| Total | 0.399262 | 0.08710001 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.439 | 8.885 | 0.6429 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8824 | | 0.0423 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-002 | 8 | 0.9375 | 0.9027 | 0.9723 | 0.8 | 1 | 0.01701 | 0.09161 | 9.77% | -10.29% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-002 | 8 | 1.315 | 1.262 | 1.369 | 1.107 | 1.412 | 0.02606 | 0.1403 | 10.67% | -10.55% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-002 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-1054-1993 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.47% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | -0.4063 | 1.761 | 0.1397 | 0.6547 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.506 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004156677 | 0.004156677 | 1 | 0.1651 | 0.6906 | Non-Significant Effect |
| Error | 0.3524379 | 0.02517414 | 14 | | | |
| Total | 0.3565946 | 0.02933081 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.287 | 8.885 | 0.7474 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9237 | | 0.1937 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-001 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-001 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -2.71% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-001 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2861-6550 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.37% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 0.03344 | 1.761 | 0.1387 | 0.4869 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.477 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 2.775521E-05 | 2.775521E-05 | 1 | 0.001118 | 0.9738 | Non-Significant Effect |
| Error | 0.3474771 | 0.0248198 | 14 | | | |
| Total | 0.3475049 | 0.02484755 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.33 | 8.885 | 0.7161 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8764 | | 0.0341 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.22% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-012 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-6340-8642 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.76% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | 0.07793 | 1.761 | 0.1327 | 0.4695 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.566 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0001379345 | 0.0001379345 | 1 | 0.006074 | 0.9390 | Non-Significant Effect |
| Error | 0.3179521 | 0.02271087 | 14 | | | |
| Total | 0.3180901 | 0.0228488 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.659 | 8.885 | 0.5204 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8963 | | 0.0702 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.49% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-010 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-6438-7016 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -0.422 | 1.761 | 0.1494 | 0.6603 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.43 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.00512692 | 0.00512692 | 1 | 0.1781 | 0.6794 | Non-Significant Effect |
| Error | 0.4030516 | 0.0287894 | 14 | | | |
| Total | 0.4081785 | 0.03391632 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.032 | 8.885 | 0.9680 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8929 | | 0.0619 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 0.0% |
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | -3.01% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | | | | | | | |
| 19830-009 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-6178-5348 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 8.35% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 0.4639 | 1.761 | 0.1071 | 0.3249 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.575 | 2.586 | 0.0530 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.003183579 | 0.003183579 | 1 | 0.2152 | 0.6498 | Non-Significant Effect |
| Error | 0.2070709 | 0.01479078 | 14 | | | |
| Total | 0.2102545 | 0.01797436 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.485 | 8.885 | 0.0659 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8893 | | 0.0544 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-017 | 8 | 0.8375 | 0.8178 | 0.8572 | 0.8 | 0.9 | 0.009611 | 0.05176 | 6.18% | 1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-017 | 8 | 1.16 | 1.132 | 1.188 | 1.107 | 1.249 | 0.01364 | 0.07344 | 6.33% | 2.37% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-017 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-5389-8074 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.61% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | -0.1699 | 1.761 | 0.1299 | 0.5662 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.122 | 2.586 | 0.3568 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0006281016 | 0.0006281016 | 1 | 0.02886 | 0.8675 | Non-Significant Effect |
| Error | 0.3047225 | 0.02176589 | 14 | | | |
| Total | 0.3053506 | 0.02239399 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.25 | 8.885 | 0.7756 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8936 | | 0.0636 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.8 | 1 | 0.01701 | 0.09161 | 10.62% | -1.47% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-016 | 8 | 1.201 | 1.148 | 1.254 | 1.107 | 1.412 | 0.02583 | 0.1391 | 11.58% | -1.05% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-016 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-4941-7239 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.4% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 90.5 | | 2 | 0.9897 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.34 | 2.586 | 0.1565 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1373977 | 0.1373977 | 1 | 7.674 | 0.0150 | Significant Effect |
| Error | 0.2506444 | 0.01790317 | 14 | | | |
| Total | 0.388042 | 0.1553008 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.082 | 8.885 | 0.3543 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.7729 | | 0.0012 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-015 | 8 | 0.975 | 0.9481 | 1 | 0.8 | 1 | 0.01313 | 0.07071 | 7.25% | -14.71% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-015 | 8 | 1.374 | 1.333 | 1.415 | 1.107 | 1.412 | 0.02002 | 0.1078 | 7.85% | -15.59% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-4273-0085 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.55% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | -1.473 | 1.761 | 0.1294 | 0.9186 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.131 | 2.586 | 0.3465 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04685238 | 0.04685238 | 1 | 2.17 | 0.1629 | Non-Significant Effect |
| Error | 0.3023191 | 0.02159422 | 14 | | | |
| Total | 0.3491715 | 0.0684466 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.273 | 8.885 | 0.7582 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9345 | | 0.2871 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-014 | 8 | 0.925 | 0.8913 | 0.9587 | 0.8 | 1 | 0.01646 | 0.08864 | 9.58% | -8.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-014 | 8 | 1.297 | 1.244 | 1.349 | 1.107 | 1.426 | 0.0256 | 0.1378 | 10.63% | -9.11% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-014 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-7821-1651 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -0.4409 | 1.761 | 0.1338 | 0.6670 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.06 | 2.586 | 0.4401 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004490668 | 0.004490668 | 1 | 0.1944 | 0.6660 | Non-Significant Effect |
| Error | 0.3233952 | 0.02309966 | 14 | | | |
| Total | 0.3278858 | 0.02759032 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.099 | 8.885 | 0.9042 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9424 | | 0.3794 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-013 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-013 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -2.82% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-013 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-4780-6414 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.87% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -0.4716 | 1.761 | 0.1522 | 0.6778 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.056 | 2.586 | 0.4456 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.006639833 | 0.006639833 | 1 | 0.2224 | 0.6445 | Non-Significant Effect |
| Error | 0.4178974 | 0.02984981 | 14 | | | |
| Total | 0.4245372 | 0.03648965 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.468 | 8.885 | 0.6250 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9204 | | 0.1710 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-011 | 8 | 0.875 | 0.8222 | 0.9278 | 0.6 | 1 | 0.02579 | 0.1389 | 15.87% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-011 | 8 | 1.229 | 1.158 | 1.301 | 0.8861 | 1.412 | 0.03499 | 0.1884 | 15.33% | -3.43% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-011 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-5381-5415 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.88% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 1.95 | 1.761 | 0.1522 | 0.0358 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.811 | 2.586 | 0.9286 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1135951 | 0.1135951 | 1 | 3.802 | 0.0715 | Non-Significant Effect |
| Error | 0.4182753 | 0.0298768 | 14 | | | |
| Total | 0.5318704 | 0.1434719 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.47 | 8.885 | 0.6237 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9295 | | 0.2391 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-007 | 8 | 0.7125 | 0.65 | 0.775 | 0.5 | 0.9 | 0.03049 | 0.1642 | 23.05% | 16.18% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-007 | 8 | 1.02 | 0.9483 | 1.092 | 0.7854 | 1.249 | 0.03502 | 0.1886 | 18.49% | 14.18% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-007 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-0939-3637 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.24% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 1.677 | 1.761 | 0.1362 | 0.0579 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.025 | 2.586 | 0.4940 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06725165 | 0.06725165 | 1 | 2.812 | 0.1158 | Non-Significant Effect |
| Error | 0.3348557 | 0.02391826 | 14 | | | |
| Total | 0.4021074 | 0.09116991 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.023 | 8.885 | 0.9770 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9151 | | 0.1406 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-006 | 8 | 0.75 | 0.7002 | 0.7998 | 0.5 | 0.9 | 0.02431 | 0.1309 | 17.46% | 11.76% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-006 | 8 | 1.059 | 1 | 1.117 | 0.7854 | 1.249 | 0.02856 | 0.1538 | 14.52% | 10.91% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-006 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-4587-7128 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.27% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 2.95 | 1.761 | 0.1656 | 0.0053 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.86 | 2.586 | 0.8123 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.307725 | 0.307725 | 1 | 8.701 | 0.0106 | Significant Effect |
| Error | 0.4951203 | 0.03536573 | 14 | | | |
| Total | 0.8028452 | 0.3430907 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.924 | 8.885 | 0.4074 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.967 | | 0.7886 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-005 | 8 | 0.6125 | 0.538 | 0.687 | 0.4 | 0.9 | 0.03639 | 0.1959 | 31.99% | 27.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-005 | 8 | 0.9112 | 0.8291 | 0.9933 | 0.6847 | 1.249 | 0.04006 | 0.2157 | 23.68% | 23.34% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-005 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-3665-4403 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 14.98% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | -0.1491 | 1.761 | 0.1724 | 0.5582 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.209 | 2.586 | 0.2611 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.000851431 | 0.000851431 | 1 | 0.02223 | 0.8836 | Non-Significant Effect |
| Error | 0.5362468 | 0.03830335 | 14 | | | |
| Total | 0.5370983 | 0.03915478 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.167 | 8.885 | 0.3291 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9034 | | 0.0912 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-004 | 8 | 0.85 | 0.7826 | 0.9174 | 0.5 | 1 | 0.03292 | 0.1773 | 20.86% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-004 | 8 | 1.203 | 1.116 | 1.29 | 0.7854 | 1.419 | 0.04252 | 0.229 | 19.03% | -1.23% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-004 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-7121-4847 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:50 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -1.713 | 1.761 | 0.1304 | 0.9456 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.114 | 2.586 | 0.3672 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06437004 | 0.06437004 | 1 | 2.934 | 0.1088 | Non-Significant Effect |
| Error | 0.3071317 | 0.02193798 | 14 | | | |
| Total | 0.3715017 | 0.08630801 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.229 | 8.885 | 0.7929 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8794 | | 0.0380 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-002 | 8 | 0.9375 | 0.9027 | 0.9723 | 0.8 | 1 | 0.01701 | 0.09161 | 9.77% | -10.29% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-002 | 8 | 1.315 | 1.262 | 1.369 | 1.107 | 1.412 | 0.02606 | 0.1403 | 10.67% | -10.67% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-002 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-9037-6977 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -0.4409 | 1.761 | 0.1338 | 0.6670 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.06 | 2.586 | 0.4401 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004490668 | 0.004490668 | 1 | 0.1944 | 0.6660 | Non-Significant Effect |
| Error | 0.3233952 | 0.02309966 | 14 | | | |
| Total | 0.3278858 | 0.02759032 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.099 | 8.885 | 0.9042 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9424 | | 0.3794 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-001 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-001 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | -2.82% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-001 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-1493-1723 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | 0.01809 | 1.761 | 0.1328 | 0.4929 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.076 | 2.586 | 0.4174 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 7.442896E-06 | 7.442896E-06 | 1 | 0.0003272 | 0.9858 | Non-Significant Effect |
| Error | 0.3184344 | 0.02274531 | 14 | | | |
| Total | 0.3184418 | 0.02275275 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.135 | 8.885 | 0.8712 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8903 | | 0.0564 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 0.11% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-012 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4738-2330 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 10.26% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | 0.06407 | 1.761 | 0.1265 | 0.4749 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.18 | 2.586 | 0.2913 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 8.472094E-05 | 8.472094E-05 | 1 | 0.004105 | 0.9498 | Non-Significant Effect |
| Error | 0.2889094 | 0.02063638 | 14 | | | |
| Total | 0.2889941 | 0.0207211 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.416 | 8.885 | 0.6579 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9114 | | 0.1227 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 0.39% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-010 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-4450-3094 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 12.03% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | -0.4536 | 1.761 | 0.1439 | 0.6715 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.916 | 2.586 | 0.6906 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.005497135 | 0.005497135 | 1 | 0.2058 | 0.6571 | Non-Significant Effect |
| Error | 0.3740088 | 0.02671492 | 14 | | | |
| Total | 0.3795059 | 0.03221205 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.209 | 8.885 | 0.8088 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9375 | | 0.3196 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | -2.94% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | -3.12% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-009 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-1114-0547 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | -0.01567 | 1.761 | 0.1427 | 0.5061 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.932 | 2.586 | 0.6577 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 6.452383E-06 | 6.452383E-06 | 1 | 0.0002457 | 0.9877 | Non-Significant Effect |
| Error | 0.3676792 | 0.0262628 | 14 | | | |
| Total | 0.3676857 | 0.02626925 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.172 | 8.885 | 0.8399 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.92 | | 0.1685 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | -0.11% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-008 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-4957-2853 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 11.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | -0.01567 | 1.761 | 0.1427 | 0.5061 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.932 | 2.586 | 0.6577 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 6.452383E-06 | 6.452383E-06 | 1 | 0.0002457 | 0.9877 | Non-Significant Effect |
| Error | 0.3676792 | 0.0262628 | 14 | | | |
| Total | 0.3676857 | 0.02626925 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.172 | 8.885 | 0.8399 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.92 | | 0.1685 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 0.0% |
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | -0.11% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | | | | | | | |
| 19830-008 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-3750-5435 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 4.44% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 5.667 | 1.761 | 0.06584 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.705 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1795121 | 0.1795121 | 1 | 32.12 | <0.0001 | Significant Effect |
| Error | 0.0782471 | 0.005589079 | 14 | | | |
| Total | 0.2577592 | 0.1851012 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.073 | 8.885 | 0.9287 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8667 | | 0.0243 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-017 | 8 | 0.8375 | 0.8178 | 0.8572 | 0.8 | 0.9 | 0.009611 | 0.05176 | 6.18% | 14.1% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-017 | 8 | 1.16 | 1.132 | 1.188 | 1.107 | 1.249 | 0.01364 | 0.07344 | 6.33% | 15.44% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-017 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-2109-4195 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.24% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 47 | | 2 | 0.0141 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.948 | 2.586 | 0.6276 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1171033 | 0.1171033 | 1 | 9.32 | 0.0086 | Significant Effect |
| Error | 0.1758986 | 0.01256419 | 14 | | | |
| Total | 0.2930019 | 0.1296675 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.344 | 8.885 | 0.1338 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8331 | | 0.0078 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-016 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.8 | 1 | 0.01701 | 0.09161 | 10.62% | 11.54% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-016 | 8 | 1.201 | 1.148 | 1.254 | 1.107 | 1.412 | 0.02583 | 0.1391 | 11.58% | 12.47% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-016 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-1499-6490 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 5.31% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 71 | | 1 | 0.6008 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.96 | 2.586 | 0.0044 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.160374E-05 | 1.160374E-05 | 1 | 0.001334 | 0.9714 | Non-Significant Effect |
| Error | 0.1218205 | 0.008701465 | 14 | | | |
| Total | 0.1218321 | 0.008713068 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.008 | 8.885 | 0.3779 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.5304 | | <0.0001 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-015 | 8 | 0.975 | 0.9481 | 1 | 0.8 | 1 | 0.01313 | 0.07071 | 7.25% | 0.0% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-015 | 8 | 1.374 | 1.333 | 1.415 | 1.107 | 1.412 | 0.02002 | 0.1078 | 7.85% | -0.12% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-4214-8079 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 3.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 63 | | 1 | 0.7683 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.005917208 | 0.005917208 | 1 | 1.9 | 0.1914 | Non-Significant Effect |
| Error | 0.0404944 | 0.003114954 | 13 | | | |
| Total | 0.0464116 | 0.009032162 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.558E+13 | 10.79 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk Normality | 0.6969 | | 0.0002 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-015 | 7 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.0% | -2.56% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-015 | 7 | 1.412 | 1.412 | 1.412 | 1.412 | 1.412 | 0 | 0 | 0.0% | -2.9% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-015 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-0124-8235 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:49 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 1.355 | 1.761 | 0.09804 | 0.0985 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.763 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02274408 | 0.02274408 | 1 | 1.835 | 0.1970 | Non-Significant Effect |
| Error | 0.1734953 | 0.01239252 | 14 | | | |
| Total | 0.1962394 | 0.0351366 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.284 | 8.885 | 0.1394 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8783 | | 0.0365 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-014 | 8 | 0.925 | 0.8913 | 0.9587 | 0.8 | 1 | 0.01646 | 0.08864 | 9.58% | 5.13% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-014 | 8 | 1.297 | 1.244 | 1.349 | 1.107 | 1.426 | 0.0256 | 0.1378 | 10.63% | 5.5% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-014 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-1581-8707 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.53% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | 2.547 | 1.761 | 0.1038 | 0.0116 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.028 | 2.586 | 0.4893 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0901519 | 0.0901519 | 1 | 6.487 | 0.0233 | Significant Effect |
| Error | 0.1945713 | 0.01389795 | 14 | | | |
| Total | 0.2847232 | 0.1040499 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.805 | 8.885 | 0.0989 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8788 | | 0.0371 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-013 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | 10.26% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-013 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | 10.94% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-013 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7053-0248 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 7.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 1.989 | 1.761 | 0.1265 | 0.0333 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.472 | 2.586 | 0.0874 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0816704 | 0.0816704 | 1 | 3.955 | 0.0666 | Non-Significant Effect |
| Error | 0.2890735 | 0.02064811 | 14 | | | |
| Total | 0.3707439 | 0.1023185 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.139 | 8.885 | 0.0288 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8756 | | 0.0332 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-011 | 8 | 0.875 | 0.8222 | 0.9278 | 0.6 | 1 | 0.02579 | 0.1389 | 15.87% | 10.26% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-011 | 8 | 1.229 | 1.158 | 1.301 | 0.8861 | 1.412 | 0.03499 | 0.1884 | 15.33% | 10.41% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-011 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0598-7460 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 7.91% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-007 | 4.898 | 1.761 | 0.1266 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.689 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4960444 | 0.4960444 | 1 | 23.99 | 0.0002 | Significant Effect |
| Error | 0.2894514 | 0.0206751 | 14 | | | |
| Total | 0.7854958 | 0.5167195 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.148 | 8.885 | 0.0286 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9167 | | 0.1493 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-007 | 8 | 0.7125 | 0.65 | 0.775 | 0.5 | 0.9 | 0.03049 | 0.1642 | 23.05% | 26.92% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-007 | 8 | 1.02 | 0.9483 | 1.092 | 0.7854 | 1.249 | 0.03502 | 0.1886 | 18.49% | 25.66% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-007 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-7077-4019 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.71% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-006 | 5.165 | 1.761 | 0.1068 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.334 | 2.586 | 0.1607 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.392621 | 0.392621 | 1 | 26.68 | 0.0001 | Significant Effect |
| Error | 0.2060319 | 0.01471656 | 14 | | | |
| Total | 0.5986528 | 0.4073375 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.088 | 8.885 | 0.0831 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9004 | | 0.0815 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-006 | 8 | 0.75 | 0.7002 | 0.7998 | 0.5 | 0.9 | 0.02431 | 0.1309 | 17.46% | 23.08% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-006 | 8 | 1.059 | 1 | 1.117 | 0.7854 | 1.249 | 0.02856 | 0.1538 | 14.52% | 22.83% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-006 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-6162-8464 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 8.91% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 5.7 | 1.761 | 0.1424 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.162 | 2.586 | 0.3105 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.8500751 | 0.8500751 | 1 | 32.49 | <0.0001 | Significant Effect |
| Error | 0.3662964 | 0.02616403 | 14 | | | |
| Total | 1.216372 | 0.8762392 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.046 | 8.885 | 0.0134 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9273 | | 0.2210 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-005 | 8 | 0.6125 | 0.538 | 0.687 | 0.4 | 0.9 | 0.03639 | 0.1959 | 31.99% | 37.18% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-005 | 8 | 0.9112 | 0.8291 | 0.9933 | 0.6847 | 1.249 | 0.04006 | 0.2157 | 23.68% | 33.6% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-005 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-0573-7968 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 9.98% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | 1.982 | 1.86 | 0.1586 | 0.0414 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.535 | 2.586 | 0.0647 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1143023 | 0.1143023 | 1 | 3.928 | 0.0675 | Non-Significant Effect |
| Error | 0.407423 | 0.02910164 | 14 | | | |
| Total | 0.5217253 | 0.1434039 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.061 | 8.885 | 0.0094 | Unequal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8745 | | 0.0319 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-004 | 8 | 0.85 | 0.7826 | 0.9174 | 0.5 | 1 | 0.03292 | 0.1773 | 20.86% | 12.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-004 | 8 | 1.203 | 1.116 | 1.29 | 0.7854 | 1.419 | 0.04252 | 0.229 | 19.03% | 12.32% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-004 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-8299-8686 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.28% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | 62 | | 2 | 0.2869 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.91 | 2.586 | 0.7015 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01289428 | 0.01289428 | 1 | 1.012 | 0.3314 | Non-Significant Effect |
| Error | 0.1783078 | 0.01273627 | 14 | | | |
| Total | 0.1912021 | 0.02563056 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.403 | 8.885 | 0.1285 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.7962 | | 0.0024 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-002 | 8 | 0.9375 | 0.9027 | 0.9723 | 0.8 | 1 | 0.01701 | 0.09161 | 9.77% | 3.85% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-002 | 8 | 1.315 | 1.262 | 1.369 | 1.107 | 1.412 | 0.02606 | 0.1403 | 10.67% | 4.14% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-002 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-8398-5100 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.53% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 2.547 | 1.761 | 0.1038 | 0.0116 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.028 | 2.586 | 0.4893 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0901519 | 0.0901519 | 1 | 6.487 | 0.0233 | Significant Effect |
| Error | 0.1945713 | 0.01389795 | 14 | | | |
| Total | 0.2847232 | 0.1040499 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.805 | 8.885 | 0.0989 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8788 | | 0.0371 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-001 | 8 | 0.875 | 0.8356 | 0.9144 | 0.7 | 1 | 0.01922 | 0.1035 | 11.83% | 10.26% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-001 | 8 | 1.222 | 1.166 | 1.279 | 0.9912 | 1.412 | 0.02755 | 0.1484 | 12.14% | 10.94% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-001 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-0485-1071 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 3.179 | 1.761 | 0.1025 | 0.0033 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2 | 2.586 | 0.5349 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1368953 | 0.1368953 | 1 | 10.11 | 0.0067 | Significant Effect |
| Error | 0.1896105 | 0.01354361 | 14 | | | |
| Total | 0.3265058 | 0.1504389 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.682 | 8.885 | 0.1069 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8499 | | 0.0136 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-012 | 8 | 0.85 | 0.8093 | 0.8907 | 0.7 | 1 | 0.01985 | 0.1069 | 12.58% | 12.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-012 | 8 | 1.187 | 1.132 | 1.243 | 0.9912 | 1.412 | 0.0271 | 0.146 | 12.29% | 13.48% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-012 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-1375-8803 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 5.98% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 3.521 | 1.761 | 0.09417 | 0.0017 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.207 | 2.586 | 0.2631 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1417296 | 0.1417296 | 1 | 12.39 | 0.0034 | Significant Effect |
| Error | 0.1600855 | 0.01143468 | 14 | | | |
| Total | 0.3018151 | 0.1531643 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.953 | 8.885 | 0.1764 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8989 | | 0.0773 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-010 | 8 | 0.85 | 0.8148 | 0.8852 | 0.7 | 1 | 0.01719 | 0.09258 | 10.89% | 12.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-010 | 8 | 1.184 | 1.134 | 1.234 | 0.9912 | 1.412 | 0.02427 | 0.1307 | 11.04% | 13.72% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-010 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-1122-7627 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 7.29% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | 2.215 | 1.761 | 0.1165 | 0.0219 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.834 | 2.586 | 0.8725 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.085921 | 0.085921 | 1 | 4.906 | 0.0439 | Significant Effect |
| Error | 0.245185 | 0.01751321 | 14 | | | |
| Total | 0.331106 | 0.1034342 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.055 | 8.885 | 0.0485 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8946 | | 0.0658 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-009 | 8 | 0.875 | 0.8307 | 0.9193 | 0.7 | 1 | 0.02163 | 0.1165 | 13.31% | 10.26% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-009 | 8 | 1.226 | 1.161 | 1.291 | 0.9912 | 1.419 | 0.03175 | 0.171 | 13.95% | 10.68% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-009 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-6920-4810 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 7.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 2.792 | 1.761 | 0.115 | 0.0072 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.761 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1330246 | 0.1330246 | 1 | 7.797 | 0.0144 | Significant Effect |
| Error | 0.2388554 | 0.0170611 | 14 | | | |
| Total | 0.37188 | 0.1500857 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.898 | 8.885 | 0.0526 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9006 | | 0.0822 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-008 | 8 | 0.85 | 0.8045 | 0.8955 | 0.7 | 1 | 0.02219 | 0.1195 | 14.06% | 12.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-008 | 8 | 1.19 | 1.126 | 1.254 | 0.9912 | 1.412 | 0.03126 | 0.1683 | 14.15% | 13.29% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-008 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-0298-8266 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:48 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | | | | | 6.77% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 3 | 1.761 | 0.1078 | 0.0048 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.558 | 2.586 | 0.0577 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.134884 | 0.134884 | 1 | 9 | 0.0096 | Significant Effect |
| Error | 0.2098126 | 0.01498662 | 14 | | | |
| Total | 0.3446966 | 0.1498706 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.181 | 8.885 | 0.0786 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8463 | | 0.0120 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.975 | 0.9574 | 0.9926 | 0.9 | 1 | 0.008596 | 0.04629 | 4.75% | 0.0% |
| 19830-003 | 8 | 0.85 | 0.8045 | 0.8955 | 0.6 | 1 | 0.02219 | 0.1195 | 14.06% | 12.82% |

**Angular (Corrected) Transformed Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.372 | 1.343 | 1.401 | 1.249 | 1.419 | 0.01412 | 0.07606 | 5.54% | 0.0% |
| 19830-003 | 8 | 1.189 | 1.129 | 1.248 | 0.8861 | 1.412 | 0.02888 | 0.1555 | 13.09% | 13.38% |

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | | | | | | | |
| 19830-003 | | | | | | | | |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-9606-6772 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.27% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | -2.197 | 1.761 | 0.4307 | 0.9773 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.243 | 2.586 | 0.2304 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.154254 | 1.154254 | 1 | 4.825 | 0.0454 | Significant Effect |
| Error | 3.349367 | 0.2392405 | 14 | | | |
| Total | 4.503621 | 1.393494 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.837 | 8.885 | 0.1923 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9661 | | 0.7716 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-017 | 8 | 3.184 | 2.958 | 3.41 | 2.574 | 4.244 | 0.1104 | 0.5948 | 18.68% | -20.3% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.708 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-4716-0880 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.31% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | -1.868 | 1.761 | 0.2728 | 0.9586 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.246 | 2.586 | 0.2272 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.334824 | 0.334824 | 1 | 3.489 | 0.0828 | Non-Significant Effect |
| Error | 1.34348 | 0.09596289 | 14 | | | |
| Total | 1.678304 | 0.4307869 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.855 | 8.885 | 0.4336 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9442 | | 0.4036 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | -10.93% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-9946-7078 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | -1.052 | 1.761 | 0.3176 | 0.8447 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.125 | 2.586 | 0.3532 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1440051 | 0.1440051 | 1 | 1.107 | 0.3105 | Non-Significant Effect |
| Error | 1.821037 | 0.1300741 | 14 | | | |
| Total | 1.965042 | 0.2740791 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.086 | 8.885 | 0.9161 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9129 | | 0.1298 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | -7.17% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-8380-0810 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.55% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | -1.201 | 1.761 | 0.3587 | 0.8751 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.823 | 2.586 | 0.9001 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2391492 | 0.2391492 | 1 | 1.442 | 0.2498 | Non-Significant Effect |
| Error | 2.322621 | 0.1659015 | 14 | | | |
| Total | 2.56177 | 0.4050506 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.661 | 8.885 | 0.5194 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9652 | | 0.7566 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | -9.24% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-1557-2928 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | -2.665 | 1.761 | 0.388 | 0.9908 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.238 | 2.586 | 0.2349 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.378495 | 1.378495 | 1 | 7.102 | 0.0185 | Significant Effect |
| Error | 2.717577 | 0.1941126 | 14 | | | |
| Total | 4.096072 | 1.572608 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.113 | 8.885 | 0.3448 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9642 | | 0.7378 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-013 | 8 | 3.234 | 3.039 | 3.429 | 2.443 | 4.186 | 0.09532 | 0.5133 | 15.87% | -22.18% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-5510-8509 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.27% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | -1.441 | 1.761 | 0.4307 | 0.9143 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.102 | 2.586 | 0.3822 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.49686 | 0.49686 | 1 | 2.078 | 0.1715 | Non-Significant Effect |
| Error | 3.34804 | 0.2391457 | 14 | | | |
| Total | 3.8449 | 0.7360057 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.835 | 8.885 | 0.1925 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9496 | | 0.4833 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-011 | 8 | 2.999 | 2.773 | 3.225 | 2.006 | 3.687 | 0.1104 | 0.5946 | 19.83% | -13.32% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-4255-8365 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.25% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 0.7479 | 1.761 | 0.2712 | 0.2335 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.26 | 2.586 | 0.2158 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.05304343 | 0.05304343 | 1 | 0.5593 | 0.4669 | Non-Significant Effect |
| Error | 1.327691 | 0.09483507 | 14 | | | |
| Total | 1.380734 | 0.1478785 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.92 | 8.885 | 0.4090 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9514 | | 0.5118 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 4.35% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-7964-1710 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.92% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | -2.133 | 1.761 | 0.2889 | 0.9745 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.121 | 2.586 | 0.3583 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4899306 | 0.4899306 | 1 | 4.551 | 0.0511 | Non-Significant Effect |
| Error | 1.506985 | 0.1076418 | 14 | | | |
| Total | 1.996915 | 0.5975724 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.377 | 8.885 | 0.6837 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9488 | | 0.4717 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | -13.22% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4743-7033 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | -1.799 | 1.761 | 0.4103 | 0.9532 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.435 | 2.586 | 0.1040 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.7025715 | 0.7025715 | 1 | 3.237 | 0.0936 | Non-Significant Effect |
| Error | 3.039008 | 0.217072 | 14 | | | |
| Total | 3.74158 | 0.9196435 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.481 | 8.885 | 0.2535 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9147 | | 0.1386 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-005 | 8 | 3.066 | 2.854 | 3.277 | 1.97 | 3.586 | 0.1033 | 0.5563 | 18.14% | -15.83% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-005 | 3.578 | 3.353 | 3.586 | 3.488 | 1.97 | 2.762 | 2.79 | 3.001 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-5972-1852 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | -1.978 | 1.761 | 0.3967 | 0.9660 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.07 | 2.586 | 0.4255 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.7941826 | 0.7941826 | 1 | 3.914 | 0.0679 | Non-Significant Effect |
| Error | 2.840725 | 0.2029089 | 14 | | | |
| Total | 3.634908 | 0.9970915 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.254 | 8.885 | 0.3057 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9605 | | 0.6703 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-004 | 8 | 3.092 | 2.891 | 3.294 | 2.494 | 3.993 | 0.09846 | 0.5302 | 17.15% | -16.84% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-8895-7335 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.06% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | -3.5 | 1.761 | 0.3986 | 0.9982 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.217 | 2.586 | 0.2541 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 2.509169 | 2.509169 | 1 | 12.25 | 0.0035 | Significant Effect |
| Error | 2.867374 | 0.2048125 | 14 | | | |
| Total | 5.376543 | 2.713981 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.285 | 8.885 | 0.2979 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.965 | | 0.7526 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-002 | 8 | 3.439 | 3.236 | 3.642 | 2.76 | 4.408 | 0.09912 | 0.5338 | 15.52% | -29.92% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-0054-5933 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 19.18% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | -1.58 | 1.761 | 0.5076 | 0.9317 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.252 | 2.586 | 0.2226 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.8288062 | 0.8288062 | 1 | 2.495 | 0.1365 | Non-Significant Effect |
| Error | 4.650354 | 0.3321681 | 14 | | | |
| Total | 5.47916 | 1.160974 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.327 | 8.885 | 0.0722 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9561 | | 0.5921 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 0.0% |
| 19830-001 | 8 | 3.102 | 2.823 | 3.381 | 1.97 | 4.356 | 0.1364 | 0.7346 | 23.68% | -17.2% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-4068-3817 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 0.3124 | 1.761 | 0.4235 | 0.3797 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.281 | 2.586 | 0.1984 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02256224 | 0.02256224 | 1 | 0.09758 | 0.7594 | Non-Significant Effect |
| Error | 3.236982 | 0.231213 | 14 | | | |
| Total | 3.259545 | 0.2537753 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.256 | 8.885 | 0.1421 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9409 | | 0.3600 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-017 | 8 | 3.184 | 2.958 | 3.41 | 2.574 | 4.244 | 0.1104 | 0.5948 | 18.68% | 2.3% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.708 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5181-8152 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 8.01% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 2.178 | 1.761 | 0.2611 | 0.0235 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.806 | 2.586 | 0.9431 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4172251 | 0.4172251 | 1 | 4.745 | 0.0470 | Significant Effect |
| Error | 1.231096 | 0.0879354 | 14 | | | |
| Total | 1.648321 | 0.5051605 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.616 | 8.885 | 0.5417 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9426 | | 0.3815 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | 9.91% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3662-4184 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 9.44% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 2.419 | 1.761 | 0.3077 | 0.0149 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.194 | 2.586 | 0.2764 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.7141761 | 0.7141761 | 1 | 5.852 | 0.0298 | Significant Effect |
| Error | 1.708652 | 0.1220466 | 14 | | | |
| Total | 2.422828 | 0.8362226 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.247 | 8.885 | 0.7787 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9348 | | 0.2901 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | 12.97% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-4436-1207 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.74% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 1.851 | 1.761 | 0.3499 | 0.0427 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.869 | 2.586 | 0.7917 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.54102 | 0.54102 | 1 | 3.427 | 0.0854 | Non-Significant Effect |
| Error | 2.210236 | 0.157874 | 14 | | | |
| Total | 2.751256 | 0.698894 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.906 | 8.885 | 0.4141 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9683 | | 0.8095 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | 11.28% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-5221-8633 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | 0.117 | 1.761 | 0.3799 | 0.4543 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.285 | 2.586 | 0.1952 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.002547828 | 0.002547828 | 1 | 0.01369 | 0.9085 | Non-Significant Effect |
| Error | 2.605191 | 0.1860851 | 14 | | | |
| Total | 2.607739 | 0.1886329 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.425 | 8.885 | 0.2653 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9843 | | 0.9884 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-013 | 8 | 3.234 | 3.039 | 3.429 | 2.443 | 4.186 | 0.09532 | 0.5133 | 15.87% | 0.77% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-4846-6775 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | 1.081 | 1.761 | 0.4234 | 0.1490 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.138 | 2.586 | 0.3373 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.270074 | 0.270074 | 1 | 1.169 | 0.2980 | Non-Significant Effect |
| Error | 3.235656 | 0.2311182 | 14 | | | |
| Total | 3.50573 | 0.5011923 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.254 | 8.885 | 0.1423 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9674 | | 0.7953 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-011 | 8 | 2.999 | 2.773 | 3.225 | 2.006 | 3.687 | 0.1104 | 0.5946 | 19.83% | 7.97% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-8352-4081 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 7.96% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 4.938 | 1.761 | 0.2595 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.765 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 2.116679 | 2.116679 | 1 | 24.38 | 0.0002 | Significant Effect |
| Error | 1.215306 | 0.08680758 | 14 | | | |
| Total | 3.331985 | 2.203486 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.673 | 8.885 | 0.5136 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9491 | | 0.4749 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 22.32% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-1702-1375 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 8.53% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 1.662 | 1.761 | 0.278 | 0.0593 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.831 | 2.586 | 0.8810 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2752251 | 0.2752251 | 1 | 2.763 | 0.1187 | Non-Significant Effect |
| Error | 1.3946 | 0.09961428 | 14 | | | |
| Total | 1.669825 | 0.3748394 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.2 | 8.885 | 0.8164 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9534 | | 0.5450 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | 8.05% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-1089-5629 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.35% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 0.8451 | 1.761 | 0.4026 | 0.2061 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.481 | 2.586 | 0.0840 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1492849 | 0.1492849 | 1 | 0.7141 | 0.4123 | Non-Significant Effect |
| Error | 2.926624 | 0.2090445 | 14 | | | |
| Total | 3.075908 | 0.3583294 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.848 | 8.885 | 0.1907 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9114 | | 0.1224 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-005 | 8 | 3.066 | 2.854 | 3.277 | 1.97 | 3.586 | 0.1033 | 0.5563 | 18.14% | 5.93% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-005 | 3.578 | 3.353 | 3.586 | 3.488 | 1.97 | 2.762 | 2.79 | 3.001 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-2835-1368 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.93% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | 0.7552 | 1.761 | 0.3888 | 0.2313 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.113 | 2.586 | 0.3690 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1111557 | 0.1111557 | 1 | 0.5704 | 0.4626 | Non-Significant Effect |
| Error | 2.72834 | 0.1948815 | 14 | | | |
| Total | 2.839496 | 0.3060371 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.587 | 8.885 | 0.2330 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9408 | | 0.3591 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-004 | 8 | 3.092 | 2.891 | 3.294 | 2.494 | 3.993 | 0.09846 | 0.5302 | 17.15% | 5.12% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0994-9704 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | -0.8103 | 1.761 | 0.3907 | 0.7843 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.262 | 2.586 | 0.2143 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1292159 | 0.1292159 | 1 | 0.6566 | 0.4313 | Non-Significant Effect |
| Error | 2.75499 | 0.196785 | 14 | | | |
| Total | 2.884206 | 0.3260009 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.622 | 8.885 | 0.2267 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9745 | | 0.9053 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-002 | 8 | 3.439 | 3.236 | 3.642 | 2.76 | 4.408 | 0.09912 | 0.5338 | 15.52% | -5.52% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-9583-8274 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.38% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | 0.5518 | 1.761 | 0.5014 | 0.2949 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.279 | 2.586 | 0.1999 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.09871 | 0.09871 | 1 | 0.3045 | 0.5898 | Non-Significant Effect |
| Error | 4.537969 | 0.3241406 | 14 | | | |
| Total | 4.636679 | 0.4228506 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.967 | 8.885 | 0.0507 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9619 | | 0.6973 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-001 | 8 | 3.102 | 2.823 | 3.381 | 1.97 | 4.356 | 0.1364 | 0.7346 | 23.68% | 4.82% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-0280-1664 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 9.23% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | 3.585 | 1.761 | 0.3008 | 0.0015 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.037 | 2.586 | 0.4742 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.49957 | 1.49957 | 1 | 12.85 | 0.0030 | Significant Effect |
| Error | 1.633521 | 0.1166801 | 14 | | | |
| Total | 3.133091 | 1.61625 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.148 | 8.885 | 0.8604 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9646 | | 0.7454 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.0% |
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 18.79% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-7656-2432 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.32% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | -0.4794 | 1.761 | 0.4683 | 0.6805 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.063 | 2.586 | 0.4363 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06499491 | 0.06499491 | 1 | 0.2298 | 0.6391 | Non-Significant Effect |
| Error | 3.959611 | 0.2828293 | 14 | | | |
| Total | 4.024606 | 0.3478242 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.67 | 8.885 | 0.5150 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9265 | | 0.2141 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-017 | 8 | 3.184 | 2.958 | 3.41 | 2.574 | 4.244 | 0.1104 | 0.5948 | 18.68% | -4.17% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.708 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-0189-4922 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.76% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 0.6445 | 1.761 | 0.329 | 0.2648 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.746 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.05797564 | 0.05797564 | 1 | 0.4154 | 0.5296 | Non-Significant Effect |
| Error | 1.953724 | 0.1395517 | 14 | | | |
| Total | 2.011699 | 0.1975273 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.152 | 8.885 | 0.1528 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9601 | | 0.6634 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | 3.94% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2877-1459 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.01% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 1.056 | 1.761 | 0.367 | 0.1545 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.839 | 2.586 | 0.8599 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1935481 | 0.1935481 | 1 | 1.115 | 0.3090 | Non-Significant Effect |
| Error | 2.43128 | 0.1736629 | 14 | | | |
| Total | 2.624829 | 0.367211 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.564 | 8.885 | 0.5693 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9713 | | 0.8596 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | 7.2% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-8847-6780 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.19% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 0.7219 | 1.761 | 0.4031 | 0.2411 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.622 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1091591 | 0.1091591 | 1 | 0.5211 | 0.4823 | Non-Significant Effect |
| Error | 2.932864 | 0.2094903 | 14 | | | |
| Total | 3.042023 | 0.3186494 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.023 | 8.885 | 0.9767 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9463 | | 0.4335 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | 5.41% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-4993-3994 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.05% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | -0.7275 | 1.761 | 0.4294 | 0.7605 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.022 | 2.586 | 0.4979 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1257924 | 0.1257924 | 1 | 0.5292 | 0.4789 | Non-Significant Effect |
| Error | 3.32782 | 0.2377014 | 14 | | | |
| Total | 3.453613 | 0.3634939 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.244 | 8.885 | 0.7809 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9759 | | 0.9229 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-013 | 8 | 3.234 | 3.039 | 3.429 | 2.443 | 4.186 | 0.09532 | 0.5133 | 15.87% | -5.8% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-0447-9171 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.32% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 0.2154 | 1.761 | 0.4683 | 0.4163 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.933 | 2.586 | 0.6551 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01311898 | 0.01311898 | 1 | 0.0464 | 0.8326 | Non-Significant Effect |
| Error | 3.958284 | 0.2827346 | 14 | | | |
| Total | 3.971403 | 0.2958536 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.669 | 8.885 | 0.5155 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9486 | | 0.4684 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-011 | 8 | 2.999 | 2.773 | 3.225 | 2.006 | 3.687 | 0.1104 | 0.5946 | 19.83% | 1.87% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8389-5177 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.72% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-007 | 2.821 | 1.761 | 0.3277 | 0.0068 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.753 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.101939 | 1.101939 | 1 | 7.961 | 0.0136 | Significant Effect |
| Error | 1.937935 | 0.1384239 | 14 | | | |
| Total | 3.039873 | 1.240363 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.262 | 8.885 | 0.1416 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9591 | | 0.6461 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 17.17% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-2794-3815 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-006 | 0.3072 | 1.761 | 0.3425 | 0.3816 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.677 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01427324 | 0.01427324 | 1 | 0.09438 | 0.7632 | Non-Significant Effect |
| Error | 2.117228 | 0.1512306 | 14 | | | |
| Total | 2.131501 | 0.1655038 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.339 | 8.885 | 0.2847 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9543 | | 0.5608 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | 1.95% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-6399-3047 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.71% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | -0.03677 | 1.761 | 0.4496 | 0.5144 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.222 | 2.586 | 0.2494 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0003524744 | 0.0003524744 | 1 | 0.001352 | 0.9712 | Non-Significant Effect |
| Error | 3.649252 | 0.2606609 | 14 | | | |
| Total | 3.649604 | 0.2610133 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.46 | 8.885 | 0.6297 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9481 | | 0.4600 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-005 | 8 | 3.066 | 2.854 | 3.277 | 1.97 | 3.586 | 0.1033 | 0.5563 | 18.14% | -0.31% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-005 | 3.578 | 3.353 | 3.586 | 3.488 | 1.97 | 2.762 | 2.79 | 3.001 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-1581-4952 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.31% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | -0.1445 | 1.761 | 0.4372 | 0.5564 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.878 | 2.586 | 0.7697 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.005147795 | 0.005147795 | 1 | 0.02088 | 0.8872 | Non-Significant Effect |
| Error | 3.450969 | 0.2464978 | 14 | | | |
| Total | 3.456116 | 0.2516456 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.327 | 8.885 | 0.7186 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9415 | | 0.3673 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-004 | 8 | 3.092 | 2.891 | 3.294 | 2.494 | 3.993 | 0.09846 | 0.5302 | 17.15% | -1.17% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-0180-9784 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.36% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | -1.534 | 1.761 | 0.4389 | 0.9264 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.013 | 2.586 | 0.5127 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5846354 | 0.5846354 | 1 | 2.354 | 0.1473 | Non-Significant Effect |
| Error | 3.477618 | 0.2484013 | 14 | | | |
| Total | 4.062253 | 0.8330367 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.345 | 8.885 | 0.7059 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.951 | | 0.5057 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-002 | 8 | 3.439 | 3.236 | 3.642 | 2.76 | 4.408 | 0.09912 | 0.5338 | 15.52% | -12.51% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-1550-1209 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | -0.1484 | 1.761 | 0.5398 | 0.5579 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.117 | 2.586 | 0.3633 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.008274968 | 0.008274968 | 1 | 0.02202 | 0.8841 | Non-Significant Effect |
| Error | 5.260597 | 0.3757569 | 14 | | | |
| Total | 5.268872 | 0.3840319 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.547 | 8.885 | 0.2406 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9661 | | 0.7722 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-001 | 8 | 3.102 | 2.823 | 3.381 | 1.97 | 4.356 | 0.1364 | 0.7346 | 23.68% | -1.49% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-2394-8840 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.82% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 1.997 | 1.761 | 0.3613 | 0.0328 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.696 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6714509 | 0.6714509 | 1 | 3.99 | 0.0656 | Non-Significant Effect |
| Error | 2.356149 | 0.1682964 | 14 | | | |
| Total | 3.0276 | 0.8397473 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.699 | 8.885 | 0.5010 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.959 | | 0.6429 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 13.4% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-4239-5846 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.53% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | -1.012 | 1.761 | 0.3526 | 0.8357 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.629 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1641452 | 0.1641452 | 1 | 1.024 | 0.3287 | Non-Significant Effect |
| Error | 2.243764 | 0.1602689 | 14 | | | |
| Total | 2.40791 | 0.3244141 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.95 | 8.885 | 0.3980 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9646 | | 0.7453 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 0.0% |
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | -6.63% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-9175-4620 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.28% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | -0.4181 | 1.761 | 0.5579 | 0.6589 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.422 | 2.586 | 0.1102 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.07014926 | 0.07014926 | 1 | 0.1748 | 0.6822 | Non-Significant Effect |
| Error | 5.619137 | 0.4013669 | 14 | | | |
| Total | 5.689287 | 0.4715162 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.269 | 8.885 | 0.7612 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9032 | | 0.0904 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-017 | 8 | 3.184 | 2.958 | 3.41 | 2.574 | 4.244 | 0.1104 | 0.5948 | 18.68% | -4.34% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.708 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-4116-7878 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 0.4544 | 1.761 | 0.4474 | 0.3282 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 3.02 | 2.586 | 0.0027 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.05329876 | 0.05329876 | 1 | 0.2065 | 0.6565 | Non-Significant Effect |
| Error | 3.61325 | 0.2580893 | 14 | | | |
| Total | 3.666549 | 0.3113881 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.679 | 8.885 | 0.0228 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8418 | | 0.0104 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | 3.78% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-8672-9488 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 9.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | -0.6391 | 1.771 | 0.2669 | 0.7331 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.034633 | 0.034633 | 1 | 0.4084 | 0.5339 | Non-Significant Effect |
| Error | 1.102361 | 0.08479699 | 13 | | | |
| Total | 1.136994 | 0.11943 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.567 | 9.155 | 0.5683 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.942 | | 0.4082 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | -3.39% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-1641-3271 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 0.7955 | 1.761 | 0.476 | 0.2198 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.838 | 2.586 | 0.0110 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1849215 | 0.1849215 | 1 | 0.6329 | 0.4396 | Non-Significant Effect |
| Error | 4.090807 | 0.2922005 | 14 | | | |
| Total | 4.275728 | 0.4771219 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.315 | 8.885 | 0.1365 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.888 | | 0.0519 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | 7.05% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-6040-7223 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.25% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 0.01809 | 1.771 | 0.3195 | 0.4929 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.978016E-05 | 3.978016E-05 | 1 | 0.0003273 | 0.9858 | Non-Significant Effect |
| Error | 1.579917 | 0.1215321 | 13 | | | |
| Total | 1.579957 | 0.1215719 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.286 | 10.79 | 0.7749 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9257 | | 0.2349 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | 0.11% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-2327-5027 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.53% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 0.5596 | 1.761 | 0.5044 | 0.2923 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.679 | 2.586 | 0.0300 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.102705 | 0.102705 | 1 | 0.3131 | 0.5846 | Non-Significant Effect |
| Error | 4.592391 | 0.3280279 | 14 | | | |
| Total | 4.695096 | 0.4307329 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.168 | 8.885 | 0.3289 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9257 | | 0.2082 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | 5.25% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-6150-2893 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.91% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | -0.2487 | 1.771 | 0.3668 | 0.5963 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.009905622 | 0.009905622 | 1 | 0.06187 | 0.8075 | Non-Significant Effect |
| Error | 2.081501 | 0.1601155 | 13 | | | |
| Total | 2.091407 | 0.1700211 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.967 | 10.79 | 0.4280 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9731 | | 0.9014 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | -1.81% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-2567-4632 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.23% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | -0.6108 | 1.761 | 0.5256 | 0.7245 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.571 | 2.586 | 0.0541 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1329247 | 0.1329247 | 1 | 0.3731 | 0.5511 | Non-Significant Effect |
| Error | 4.987346 | 0.356239 | 14 | | | |
| Total | 5.120271 | 0.4891637 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.704 | 8.885 | 0.4988 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8964 | | 0.0705 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-013 | 8 | 3.234 | 3.039 | 3.429 | 2.443 | 4.186 | 0.09532 | 0.5133 | 15.87% | -5.97% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-8654-1325 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.28% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 0.1652 | 1.761 | 0.5579 | 0.4356 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.422 | 2.586 | 0.1100 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01094578 | 0.01094578 | 1 | 0.02728 | 0.8712 | Non-Significant Effect |
| Error | 5.61781 | 0.4012721 | 14 | | | |
| Total | 5.628756 | 0.4122179 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.27 | 8.885 | 0.7607 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9586 | | 0.6357 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-011 | 8 | 2.999 | 2.773 | 3.225 | 2.006 | 3.687 | 0.1104 | 0.5946 | 19.83% | 1.71% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-9143-3953 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.63% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 2.051 | 1.761 | 0.4464 | 0.0297 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 3.027 | 2.586 | 0.0025 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.081219 | 1.081219 | 1 | 4.208 | 0.0594 | Non-Significant Effect |
| Error | 3.597461 | 0.2569615 | 14 | | | |
| Total | 4.678679 | 1.33818 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.911 | 8.885 | 0.0207 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8438 | | 0.0111 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 17.04% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-8569-4580 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 9.33% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 2.06 | 1.771 | 0.265 | 0.0300 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3545272 | 0.3545272 | 1 | 4.242 | 0.0601 | Non-Significant Effect |
| Error | 1.086571 | 0.08358242 | 13 | | | |
| Total | 1.441098 | 0.4381096 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.621 | 9.155 | 0.5404 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9487 | | 0.5047 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 10.85% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8727-5164 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | 0.2109 | 1.761 | 0.4574 | 0.4180 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.954 | 2.586 | 0.0047 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01200221 | 0.01200221 | 1 | 0.04449 | 0.8360 | Non-Significant Effect |
| Error | 3.776755 | 0.2697682 | 14 | | | |
| Total | 3.788757 | 0.2817704 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.957 | 8.885 | 0.0510 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8688 | | 0.0261 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | 1.8% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-7363-8845 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.07% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | -0.972 | 1.771 | 0.286 | 0.8256 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.09198886 | 0.09198886 | 1 | 0.9447 | 0.3488 | Non-Significant Effect |
| Error | 1.265865 | 0.09737424 | 13 | | | |
| Total | 1.357854 | 0.1893631 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.163 | 9.155 | 0.8375 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9355 | | 0.3288 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | -5.53% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8806-1512 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.77% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | -0.04659 | 1.761 | 0.5423 | 0.5183 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.492 | 2.586 | 0.0799 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0008231372 | 0.0008231372 | 1 | 0.002171 | 0.9635 | Non-Significant Effect |
| Error | 5.308778 | 0.3791985 | 14 | | | |
| Total | 5.309601 | 0.3800216 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.451 | 8.885 | 0.6356 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.955 | | 0.5728 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-005 | 8 | 3.066 | 2.854 | 3.277 | 1.97 | 3.586 | 0.1033 | 0.5563 | 18.14% | -0.47% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-005 | 3.578 | 3.353 | 3.586 | 3.488 | 1.97 | 2.762 | 2.79 | 3.001 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-2820-6909 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.44% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | -0.1352 | 1.761 | 0.5321 | 0.5528 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.539 | 2.586 | 0.0633 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.006669042 | 0.006669042 | 1 | 0.01827 | 0.8944 | Non-Significant Effect |
| Error | 5.110495 | 0.3650354 | 14 | | | |
| Total | 5.117164 | 0.3717044 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.597 | 8.885 | 0.5518 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9175 | | 0.1535 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-004 | 8 | 3.092 | 2.891 | 3.294 | 2.494 | 3.993 | 0.09846 | 0.5302 | 17.15% | -1.34% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1446-8354 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.48% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | -1.279 | 1.761 | 0.5335 | 0.8891 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.533 | 2.586 | 0.0654 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5998976 | 0.5998976 | 1 | 1.635 | 0.2218 | Non-Significant Effect |
| Error | 5.137145 | 0.3669389 | 14 | | | |
| Total | 5.737042 | 0.9668365 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.576 | 8.885 | 0.5632 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8979 | | 0.0745 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-002 | 8 | 3.439 | 3.236 | 3.642 | 2.76 | 4.408 | 0.09912 | 0.5338 | 15.52% | -12.69% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-4194-3293 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 20.29% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | -0.1435 | 1.761 | 0.6192 | 0.5560 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.182 | 2.586 | 0.2886 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01017736 | 0.01017736 | 1 | 0.02059 | 0.8879 | Non-Significant Effect |
| Error | 6.920124 | 0.4942946 | 14 | | | |
| Total | 6.930301 | 0.5044719 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.202 | 8.885 | 0.8145 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9045 | | 0.0949 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-001 | 8 | 3.102 | 2.823 | 3.381 | 1.97 | 4.356 | 0.1364 | 0.7346 | 23.68% | -1.65% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-8916-7454 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 1.511 | 1.761 | 0.4717 | 0.0765 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.865 | 2.586 | 0.0091 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6552984 | 0.6552984 | 1 | 2.285 | 0.1529 | Non-Significant Effect |
| Error | 4.015676 | 0.286834 | 14 | | | |
| Total | 4.670974 | 0.9421324 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.6 | 8.885 | 0.1127 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8852 | | 0.0468 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 13.26% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-5807-1902 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.98% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 1.096 | 1.771 | 0.3118 | 0.1465 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1390691 | 0.1390691 | 1 | 1.201 | 0.2929 | Non-Significant Effect |
| Error | 1.504786 | 0.1157528 | 13 | | | |
| Total | 1.643855 | 0.2548219 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.184 | 10.79 | 0.8527 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9476 | | 0.4869 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 6.8% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-3279-4497 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.24% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | -0.7861 | 1.761 | 0.465 | 0.7775 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.906 | 2.586 | 0.0068 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1722784 | 0.1722784 | 1 | 0.6179 | 0.4449 | Non-Significant Effect |
| Error | 3.903291 | 0.2788065 | 14 | | | |
| Total | 4.07557 | 0.4510849 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.132 | 8.885 | 0.0809 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8849 | | 0.0463 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | -6.8% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-9311-7307 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.56% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | -2.475 | 1.771 | 0.3 | 0.9861 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6563054 | 0.6563054 | 1 | 6.128 | 0.0279 | Significant Effect |
| Error | 1.392401 | 0.1071078 | 13 | | | |
| Total | 2.048707 | 0.7634132 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.032 | 10.79 | 0.9859 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9432 | | 0.4238 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | -14.76% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-2683-2598 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.59% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -0.01725 | 1.761 | 0.5062 | 0.5068 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.669 | 2.586 | 0.0317 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 9.832839E-05 | 9.832839E-05 | 1 | 0.0002976 | 0.9865 | Non-Significant Effect |
| Error | 4.625919 | 0.3304228 | 14 | | | |
| Total | 4.626018 | 0.3305211 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.119 | 8.885 | 0.3431 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9144 | | 0.1371 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 0.0% |
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | -0.16% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-0706-3834 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.02% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.038 | 1.771 | 0.3697 | 0.8409 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1753233 | 0.1753233 | 1 | 1.078 | 0.3182 | Non-Significant Effect |
| Error | 2.11503 | 0.1626946 | 13 | | | |
| Total | 2.290353 | 0.3380179 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.012 | 10.79 | 0.4126 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9609 | | 0.7076 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 0.0% |
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | -7.63% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-2490-8350 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 0.3935 | 1.761 | 0.4807 | 0.3500 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.01 | 2.586 | 0.5178 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0461205 | 0.0461205 | 1 | 0.1548 | 0.6999 | Non-Significant Effect |
| Error | 4.17082 | 0.2979158 | 14 | | | |
| Total | 4.216941 | 0.3440363 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.462 | 8.885 | 0.6291 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9034 | | 0.0910 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-017 | 8 | 3.184 | 2.958 | 3.41 | 2.574 | 4.244 | 0.1104 | 0.5948 | 18.68% | 3.26% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.708 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-3380-5865 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.52% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 1.807 | 1.761 | 0.3463 | 0.0462 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.112 | 2.586 | 0.3695 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5047806 | 0.5047806 | 1 | 3.264 | 0.0923 | Non-Significant Effect |
| Error | 2.164934 | 0.1546381 | 14 | | | |
| Total | 2.669714 | 0.6594187 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.601 | 8.885 | 0.1127 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9453 | | 0.4184 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | 10.79% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-9028-5518 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.62% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 2.094 | 1.761 | 0.3826 | 0.0275 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.912 | 2.586 | 0.6985 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.8274429 | 0.8274429 | 1 | 4.384 | 0.0550 | Non-Significant Effect |
| Error | 2.64249 | 0.1887493 | 14 | | | |
| Total | 3.469933 | 1.016192 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.787 | 8.885 | 0.4615 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9788 | | 0.9534 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | 13.82% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-6958-5979 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.68% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 1.688 | 1.761 | 0.4173 | 0.0567 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.753 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6401442 | 0.6401442 | 1 | 2.85 | 0.1135 | Non-Significant Effect |
| Error | 3.144074 | 0.2245767 | 14 | | | |
| Total | 3.784218 | 0.8647209 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.169 | 8.885 | 0.8422 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9587 | | 0.6383 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | 12.15% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-2428-6642 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.45% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | 0.2288 | 1.761 | 0.4428 | 0.4112 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.961 | 2.586 | 0.6030 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01323087 | 0.01323087 | 1 | 0.05234 | 0.8223 | Non-Significant Effect |
| Error | 3.53903 | 0.2527878 | 14 | | | |
| Total | 3.55226 | 0.2660187 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.089 | 8.885 | 0.9137 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9443 | | 0.4050 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-013 | 8 | 3.234 | 3.039 | 3.429 | 2.443 | 4.186 | 0.09532 | 0.5133 | 15.87% | 1.75% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-5889-5385 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | 1.071 | 1.761 | 0.4806 | 0.1512 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.884 | 2.586 | 0.7578 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3413317 | 0.3413317 | 1 | 1.146 | 0.3025 | Non-Significant Effect |
| Error | 4.169494 | 0.297821 | 14 | | | |
| Total | 4.510825 | 0.6391526 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.461 | 8.885 | 0.6295 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9543 | | 0.5606 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-011 | 8 | 2.999 | 2.773 | 3.225 | 2.006 | 3.687 | 0.1104 | 0.5946 | 19.83% | 8.88% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2491-2592 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.48% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 3.878 | 1.761 | 0.345 | 0.0008 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.12 | 2.586 | 0.3598 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 2.308669 | 2.308669 | 1 | 15.04 | 0.0017 | Significant Effect |
| Error | 2.149144 | 0.1535103 | 14 | | | |
| Total | 4.457813 | 2.462179 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.726 | 8.885 | 0.1039 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9457 | | 0.4253 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 23.08% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-5091-9226 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.91% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 1.445 | 1.761 | 0.3591 | 0.0853 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.037 | 2.586 | 0.4751 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3471195 | 0.3471195 | 1 | 2.087 | 0.1706 | Non-Significant Effect |
| Error | 2.328438 | 0.166317 | 14 | | | |
| Total | 2.675558 | 0.5134365 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.672 | 8.885 | 0.2180 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9503 | | 0.4942 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | 8.95% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-2654-0136 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.05% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 0.8587 | 1.761 | 0.4624 | 0.2025 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.16 | 2.586 | 0.3125 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.203332 | 0.203332 | 1 | 0.7374 | 0.4050 | Non-Significant Effect |
| Error | 3.860462 | 0.2757473 | 14 | | | |
| Total | 4.063794 | 0.4790793 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.278 | 8.885 | 0.7542 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9601 | | 0.6635 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-005 | 8 | 3.066 | 2.854 | 3.277 | 1.97 | 3.586 | 0.1033 | 0.5563 | 18.14% | 6.85% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-005 | 3.578 | 3.353 | 3.586 | 3.488 | 1.97 | 2.762 | 2.79 | 3.001 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-7586-4603 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.68% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | 0.7781 | 1.761 | 0.4504 | 0.2247 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.823 | 2.586 | 0.8985 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.158364 | 0.158364 | 1 | 0.6054 | 0.4495 | Non-Significant Effect |
| Error | 3.662178 | 0.2615842 | 14 | | | |
| Total | 3.820542 | 0.4199481 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.161 | 8.885 | 0.8486 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9222 | | 0.1832 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-004 | 8 | 3.092 | 2.891 | 3.294 | 2.494 | 3.993 | 0.09846 | 0.5302 | 17.15% | 6.05% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0320-3835 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.73% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -0.5745 | 1.761 | 0.452 | 0.7126 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.954 | 2.586 | 0.6148 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.08697585 | 0.08697585 | 1 | 0.3301 | 0.5747 | Non-Significant Effect |
| Error | 3.688828 | 0.2634877 | 14 | | | |
| Total | 3.775804 | 0.3504635 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.177 | 8.885 | 0.8352 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9108 | | 0.1199 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-002 | 8 | 3.439 | 3.236 | 3.642 | 2.76 | 4.408 | 0.09912 | 0.5338 | 15.52% | -4.48% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-4074-5507 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.73% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | 0.6058 | 1.761 | 0.5506 | 0.2772 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.076 | 2.586 | 0.4178 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1434372 | 0.1434372 | 1 | 0.367 | 0.5543 | Non-Significant Effect |
| Error | 5.471807 | 0.3908434 | 14 | | | |
| Total | 5.615244 | 0.5342805 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.229 | 8.885 | 0.3121 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.926 | | 0.2107 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-001 | 8 | 3.102 | 2.823 | 3.381 | 1.97 | 4.356 | 0.1364 | 0.7346 | 23.68% | 5.75% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-4269-8935 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | 3.01 | 1.761 | 0.3771 | 0.0047 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.94 | 2.586 | 0.6431 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.661828 | 1.661828 | 1 | 9.062 | 0.0094 | Significant Effect |
| Error | 2.567359 | 0.1833828 | 14 | | | |
| Total | 4.229187 | 1.84521 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.941 | 8.885 | 0.4013 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9614 | | 0.6871 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 19.58% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-3826-0406 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | 0.1541 | 1.761 | 0.3688 | 0.4398 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.983 | 2.586 | 0.5624 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.004166638 | 0.004166638 | 1 | 0.02376 | 0.8797 | Non-Significant Effect |
| Error | 2.454974 | 0.1753553 | 14 | | | |
| Total | 2.459141 | 0.1795219 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.228 | 8.885 | 0.3125 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9442 | | 0.4033 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | 0.98% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-1082-3691 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.75% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | 0.9859 | 1.761 | 0.4196 | 0.1705 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.743 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2206161 | 0.2206161 | 1 | 0.972 | 0.3409 | Non-Significant Effect |
| Error | 3.177603 | 0.2269716 | 14 | | | |
| Total | 3.398219 | 0.4475877 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.142 | 8.885 | 0.8651 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9159 | | 0.1451 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | 7.14% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7708-7093 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.73% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | 0.8159 | 1.761 | 0.5176 | 0.2141 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.61 | 2.586 | 0.0439 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2300295 | 0.2300295 | 1 | 0.6658 | 0.4282 | Non-Significant Effect |
| Error | 4.837129 | 0.3455092 | 14 | | | |
| Total | 5.067159 | 0.5755387 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.855 | 8.885 | 0.4338 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8859 | | 0.0481 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | 7.29% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-0532-3900 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.78% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | 2.063 | 1.771 | 0.3877 | 0.0299 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.7612345 | 0.7612345 | 1 | 4.254 | 0.0597 | Non-Significant Effect |
| Error | 2.326239 | 0.1789415 | 13 | | | |
| Total | 3.087474 | 0.940176 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.299 | 10.79 | 0.3301 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9518 | | 0.5524 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | 0.0% |
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 13.72% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-3816-2803 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.24% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | -1.099 | 1.761 | 0.4431 | 0.8548 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.18 | 2.586 | 0.2906 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3056421 | 0.3056421 | 1 | 1.207 | 0.2904 | Non-Significant Effect |
| Error | 3.544249 | 0.2531606 | 14 | | | |
| Total | 3.849891 | 0.5588027 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.319 | 8.885 | 0.2895 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9367 | | 0.3102 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-017 | 8 | 3.184 | 2.958 | 3.41 | 2.574 | 4.244 | 0.1104 | 0.5948 | 18.68% | -9.51% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-017 | 2.855 | 4.244 | 3.761 | 3.29 | 3.372 | 2.574 | 2.708 | 2.668 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-3573-8527 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.04% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | -0.1723 | 1.761 | 0.2919 | 0.5672 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.209 | 2.586 | 0.2614 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.003263467 | 0.003263467 | 1 | 0.0297 | 0.8656 | Non-Significant Effect |
| Error | 1.538362 | 0.109883 | 14 | | | |
| Total | 1.541625 | 0.1131465 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.269 | 8.885 | 0.3018 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9643 | | 0.7397 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-016 | 8 | 2.936 | 2.837 | 3.035 | 2.419 | 3.24 | 0.04814 | 0.2593 | 8.83% | -0.98% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-016 | 2.419 | 2.781 | 2.925 | 3.105 | 3.24 | 3.175 | 2.909 | 2.935 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2095-7945 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.49% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 0.3743 | 1.761 | 0.3342 | 0.3569 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.02 | 2.586 | 0.5014 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02017337 | 0.02017337 | 1 | 0.1401 | 0.7138 | Non-Significant Effect |
| Error | 2.015918 | 0.1439942 | 14 | | | |
| Total | 2.036092 | 0.1641675 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.126 | 8.885 | 0.8793 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.974 | | 0.8979 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-015 | 8 | 2.836 | 2.697 | 2.976 | 2.096 | 3.205 | 0.06834 | 0.368 | 12.97% | 2.44% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.985 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-5589-3489 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.84% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 0.0766 | 1.761 | 0.3734 | 0.4700 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.751 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001055225 | 0.001055225 | 1 | 0.005868 | 0.9400 | Non-Significant Effect |
| Error | 2.517502 | 0.1798216 | 14 | | | |
| Total | 2.518558 | 0.1808768 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.358 | 8.885 | 0.6969 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9725 | | 0.8779 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-014 | 8 | 2.891 | 2.718 | 3.064 | 2.174 | 3.514 | 0.08451 | 0.4551 | 15.74% | 0.56% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-014 | 2.174 | 3.035 | 3.341 | 3.514 | 3.121 | 2.873 | 2.633 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-9662-2077 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.81% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | -1.431 | 1.761 | 0.4017 | 0.9128 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.161 | 2.586 | 0.3109 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4258612 | 0.4258612 | 1 | 2.047 | 0.1744 | Non-Significant Effect |
| Error | 2.912458 | 0.2080327 | 14 | | | |
| Total | 3.338319 | 0.6338938 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.727 | 8.885 | 0.4878 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9672 | | 0.7917 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-013 | 8 | 3.234 | 3.039 | 3.429 | 2.443 | 4.186 | 0.09532 | 0.5133 | 15.87% | -11.22% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-013 | 3.254 | 2.443 | 3.331 | 3.17 | 4.186 | 2.834 | 3.079 | 3.572 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-4492-1276 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.24% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | -0.3645 | 1.761 | 0.443 | 0.6395 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.044 | 2.586 | 0.4645 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03362453 | 0.03362453 | 1 | 0.1329 | 0.7209 | Non-Significant Effect |
| Error | 3.542922 | 0.2530659 | 14 | | | |
| Total | 3.576546 | 0.2866904 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.318 | 8.885 | 0.2898 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9536 | | 0.5485 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-011 | 8 | 2.999 | 2.773 | 3.225 | 2.006 | 3.687 | 0.1104 | 0.5946 | 19.83% | -3.15% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-011 | 2.353 | 2.948 | 3.679 | 3.271 | 3.197 | 2.854 | 2.006 | 3.687 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-7413-8820 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 9.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-007 | 2.28 | 1.761 | 0.2904 | 0.0194 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.221 | 2.586 | 0.2505 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5652403 | 0.5652403 | 1 | 5.197 | 0.0388 | Significant Effect |
| Error | 1.522573 | 0.1087552 | 14 | | | |
| Total | 2.087813 | 0.6739954 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.348 | 8.885 | 0.2826 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9665 | | 0.7793 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-007 | 8 | 2.532 | 2.435 | 2.629 | 2.03 | 2.86 | 0.04733 | 0.2549 | 10.07% | 12.93% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-007 | 2.654 | 2.5 | 2.368 | 2.496 | 2.03 | 2.598 | 2.748 | 2.86 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-7865-7192 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.56% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-006 | -0.5118 | 1.761 | 0.307 | 0.6916 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.1 | 2.586 | 0.3847 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03183991 | 0.03183991 | 1 | 0.2619 | 0.6168 | Non-Significant Effect |
| Error | 1.701866 | 0.1215619 | 14 | | | |
| Total | 1.733706 | 0.1534018 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.684 | 8.885 | 0.5080 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9595 | | 0.6521 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-006 | 8 | 2.997 | 2.882 | 3.111 | 2.439 | 3.434 | 0.05589 | 0.301 | 10.04% | -3.07% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-006 | 2.748 | 3.434 | 2.925 | 2.439 | 3.099 | 3.099 | 3.029 | 3.203 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-5031-3971 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.56% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | -0.6589 | 1.761 | 0.4233 | 0.7397 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.36 | 2.586 | 0.1439 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1002877 | 0.1002877 | 1 | 0.4342 | 0.5206 | Non-Significant Effect |
| Error | 3.23389 | 0.2309921 | 14 | | | |
| Total | 3.334178 | 0.3312799 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.028 | 8.885 | 0.3713 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9606 | | 0.6732 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-005 | 8 | 3.066 | 2.854 | 3.277 | 1.97 | 3.586 | 0.1033 | 0.5563 | 18.14% | -5.45% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-005 | 3.578 | 3.353 | 3.586 | 3.488 | 1.97 | 2.762 | 2.79 | 3.001 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5389-8097 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | -0.7939 | 1.761 | 0.4101 | 0.7797 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.003 | 2.586 | 0.5294 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1366457 | 0.1366457 | 1 | 0.6302 | 0.4405 | Non-Significant Effect |
| Error | 3.035607 | 0.216829 | 14 | | | |
| Total | 3.172252 | 0.3534747 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.843 | 8.885 | 0.4386 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9499 | | 0.4882 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-004 | 8 | 3.092 | 2.891 | 3.294 | 2.494 | 3.993 | 0.09846 | 0.5302 | 17.15% | -6.36% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-004 | 2.536 | 3.267 | 3.39 | 3.436 | 3.993 | 3.027 | 2.494 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-2065-6487 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.17% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | -2.272 | 1.761 | 0.4119 | 0.9803 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.145 | 2.586 | 0.3295 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.128954 | 1.128954 | 1 | 5.161 | 0.0394 | Significant Effect |
| Error | 3.062256 | 0.2187326 | 14 | | | |
| Total | 4.19121 | 1.347687 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.868 | 8.885 | 0.4287 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9575 | | 0.6167 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-002 | 8 | 3.439 | 3.236 | 3.642 | 2.76 | 4.408 | 0.09912 | 0.5338 | 15.52% | -18.27% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-002 | 2.76 | 3.975 | 4.408 | 3.092 | 3.38 | 3.293 | 3.052 | 3.55 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5380-8744 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.82% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | -0.661 | 1.761 | 0.5181 | 0.7403 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.206 | 2.586 | 0.2645 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1512237 | 0.1512237 | 1 | 0.437 | 0.5193 | Non-Significant Effect |
| Error | 4.845235 | 0.3460882 | 14 | | | |
| Total | 4.996459 | 0.4973119 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.537 | 8.885 | 0.1175 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9539 | | 0.5531 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-001 | 8 | 3.102 | 2.823 | 3.381 | 1.97 | 4.356 | 0.1364 | 0.7346 | 23.68% | -6.69% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-001 | 2.712 | 4.356 | 3.091 | 3.894 | 2.736 | 1.97 | 3.035 | 3.023 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-0742-2906 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.28% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 1.401 | 1.761 | 0.3279 | 0.0915 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.967 | 2.586 | 0.5920 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2719758 | 0.2719758 | 1 | 1.962 | 0.1831 | Non-Significant Effect |
| Error | 1.940787 | 0.1386277 | 14 | | | |
| Total | 2.212763 | 0.4106035 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.223 | 8.885 | 0.7972 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9741 | | 0.8994 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-012 | 8 | 2.647 | 2.512 | 2.781 | 1.974 | 3.112 | 0.06558 | 0.3531 | 13.34% | 8.97% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-012 | 2.536 | 3.02 | 1.974 | 2.664 | 3.112 | 2.8 | 2.493 | 2.575 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-6433-2365 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.95% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | -1.945 | 1.761 | 0.3183 | 0.9640 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.026 | 2.586 | 0.4911 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4942883 | 0.4942883 | 1 | 3.785 | 0.0721 | Non-Significant Effect |
| Error | 1.828403 | 0.1306002 | 14 | | | |
| Total | 2.322691 | 0.6248885 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.404 | 8.885 | 0.6656 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9784 | | 0.9496 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-010 | 8 | 3.259 | 3.134 | 3.384 | 2.757 | 3.683 | 0.06121 | 0.3296 | 10.11% | -12.09% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-010 | 2.757 | 3.411 | 3.683 | 3.492 | 3.559 | 3.218 | 2.977 | 2.976 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-0698-5959 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.93% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | -0.6979 | 1.761 | 0.3759 | 0.7517 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.716 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.08874922 | 0.08874922 | 1 | 0.4871 | 0.4967 | Non-Significant Effect |
| Error | 2.551031 | 0.1822165 | 14 | | | |
| Total | 2.63978 | 0.2709657 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.389 | 8.885 | 0.6755 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9405 | | 0.3553 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-009 | 8 | 3.056 | 2.881 | 3.232 | 2.431 | 3.687 | 0.08548 | 0.4603 | 15.06% | -5.12% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-009 | 2.564 | 2.431 | 3.175 | 3.666 | 3.687 | 2.809 | 3.007 | 3.113 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-0049-4557 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.61% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | -0.5251 | 1.761 | 0.483 | 0.6961 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.798 | 2.586 | 0.0145 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.08293939 | 0.08293939 | 1 | 0.2758 | 0.6077 | Non-Significant Effect |
| Error | 4.210557 | 0.3007541 | 14 | | | |
| Total | 4.293497 | 0.3836935 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.943 | 8.885 | 0.1777 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8885 | | 0.0527 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-008 | 8 | 3.052 | 2.797 | 3.306 | 2.276 | 4.534 | 0.1244 | 0.67 | 21.96% | -4.95% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-008 | 3.004 | 3.26 | 3.052 | 4.534 | 2.738 | 2.926 | 2.276 | 2.623 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0444-5030 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 0.362 | 1.771 | 0.3314 | 0.3616 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01713736 | 0.01713736 | 1 | 0.1311 | 0.7231 | Non-Significant Effect |
| Error | 1.699668 | 0.1307437 | 13 | | | |
| Total | 1.716805 | 0.147881 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.449 | 10.79 | 0.6676 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9665 | | 0.8033 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-008 | 7 | 2.84 | 2.716 | 2.963 | 2.276 | 3.26 | 0.06026 | 0.3245 | 11.43% | 2.33% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-008 | 3.004 | 3.26 | 3.052 | Outlier | 2.738 | 2.926 | 2.276 | 2.623 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-4367-3499 | **Endpoint:** | Wet Weight - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.45% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | -1.728 | 1.761 | 0.3912 | 0.9470 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.87 | 2.586 | 0.7887 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5892188 | 0.5892188 | 1 | 2.986 | 0.1060 | Non-Significant Effect |
| Error | 2.762241 | 0.1973029 | 14 | | | |
| Total | 3.35146 | 0.7865217 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.587 | 8.885 | 0.5573 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9236 | | 0.1926 | Normal Distribution |

**Wet Weight - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.908 | 2.759 | 3.056 | 2.289 | 3.615 | 0.07253 | 0.3906 | 13.43% | 0.0% |
| 19830-003 | 8 | 3.291 | 3.104 | 3.478 | 2.753 | 4.094 | 0.09136 | 0.492 | 14.95% | -13.2% |

**Wet Weight - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.997 | 3.086 | 2.92 | 2.676 | 3.041 | 2.289 |
| 19830-003 | 3.017 | 4.094 | 2.753 | 3.146 | 3.976 | 2.89 | 3.113 | 3.342 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-5969-7919 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:01 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.94% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | -1.726 | 1.761 | 0.4263 | 0.9468 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.554 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6976423 | 0.6976423 | 1 | 2.977 | 0.1064 | Non-Significant Effect |
| Error | 3.280411 | 0.2343151 | 14 | | | |
| Total | 3.978053 | 0.9319573 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.535 | 8.885 | 0.5856 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8783 | | 0.0364 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-017 | 8 | 2.668 | 2.466 | 2.871 | 2.134 | 3.395 | 0.09892 | 0.5327 | 19.96% | -18.55% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-5209-7575 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:01 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.54% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | -1.426 | 1.761 | 0.3499 | 0.9121 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.67 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3209221 | 0.3209221 | 1 | 2.033 | 0.1758 | Non-Significant Effect |
| Error | 2.209836 | 0.1578454 | 14 | | | |
| Total | 2.530758 | 0.4787675 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.413 | 8.885 | 0.6598 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9587 | | 0.6389 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-016 | 8 | 2.534 | 2.397 | 2.672 | 1.935 | 3.175 | 0.06717 | 0.3617 | 14.27% | -12.58% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8916-7474 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:01 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.12% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | -2.48 | 1.761 | 0.3628 | 0.9868 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.673 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.044484 | 1.044484 | 1 | 6.153 | 0.0264 | Significant Effect |
| Error | 2.376626 | 0.169759 | 14 | | | |
| Total | 3.421109 | 1.214243 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.195 | 8.885 | 0.8200 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9274 | | 0.2216 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-015 | 8 | 2.762 | 2.612 | 2.911 | 2.096 | 3.205 | 0.07303 | 0.3933 | 14.24% | -22.7% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-9343-6454 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:01 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.58% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | -1.931 | 1.761 | 0.3732 | 0.9630 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.086 | 2.586 | 0.4035 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6693284 | 0.6693284 | 1 | 3.728 | 0.0740 | Non-Significant Effect |
| Error | 2.513796 | 0.1795568 | 14 | | | |
| Total | 3.183124 | 0.8488852 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.061 | 8.885 | 0.9399 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9338 | | 0.2799 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-014 | 8 | 2.66 | 2.501 | 2.819 | 2.174 | 3.514 | 0.07752 | 0.4174 | 15.69% | -18.17% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-2090-9758 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:01 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | -2.58 | 1.761 | 0.3849 | 0.9891 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.967 | 2.586 | 0.5917 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.271256 | 1.271256 | 1 | 6.654 | 0.0218 | Significant Effect |
| Error | 2.674729 | 0.1910521 | 14 | | | |
| Total | 3.945986 | 1.462309 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.067 | 8.885 | 0.9340 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9468 | | 0.4403 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-013 | 8 | 2.815 | 2.646 | 2.984 | 1.984 | 3.349 | 0.08247 | 0.4441 | 15.78% | -25.05% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-8872-5457 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.86% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | -1.503 | 1.761 | 0.3796 | 0.9224 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.672 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4195801 | 0.4195801 | 1 | 2.258 | 0.1551 | Non-Significant Effect |
| Error | 2.601198 | 0.1857999 | 14 | | | |
| Total | 3.020778 | 0.60538 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.01 | 8.885 | 0.9897 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.926 | | 0.2105 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-011 | 8 | 2.575 | 2.41 | 2.739 | 2.006 | 3.271 | 0.08025 | 0.4321 | 16.78% | -14.39% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-1372-1718 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.77% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 2.304 | 1.761 | 0.3549 | 0.0185 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.413 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.8621125 | 0.8621125 | 1 | 5.307 | 0.0371 | Significant Effect |
| Error | 2.274225 | 0.1624446 | 14 | | | |
| Total | 3.136337 | 1.024557 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.32 | 8.885 | 0.7234 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8898 | | 0.0554 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-007 | 8 | 1.787 | 1.644 | 1.929 | 1.327 | 2.246 | 0.06949 | 0.3742 | 20.95% | 20.63% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-3964-6922 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | 0.07949 | 1.761 | 0.3601 | 0.4689 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.404 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.00105625 | 0.00105625 | 1 | 0.006319 | 0.9378 | Non-Significant Effect |
| Error | 2.340195 | 0.1671568 | 14 | | | |
| Total | 2.341251 | 0.168213 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.237 | 8.885 | 0.7863 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9148 | | 0.1392 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-006 | 8 | 2.235 | 2.088 | 2.382 | 1.707 | 2.789 | 0.07179 | 0.3866 | 17.3% | 0.72% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-6877-3116 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 23.38% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 1.243 | 1.761 | 0.5262 | 0.1171 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.714 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5516778 | 0.5516778 | 1 | 1.545 | 0.2342 | Non-Significant Effect |
| Error | 4.997612 | 0.3569723 | 14 | | | |
| Total | 5.54929 | 0.9086501 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.862 | 8.885 | 0.1887 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.862 | | 0.0206 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-005 | 8 | 1.879 | 1.603 | 2.156 | 1.182 | 2.869 | 0.1351 | 0.7274 | 38.7% | 16.5% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-1114-3390 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 23.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | -1.311 | 1.761 | 0.5312 | 0.8946 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.401 | 2.586 | 0.1205 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6254292 | 0.6254292 | 1 | 1.719 | 0.2109 | Non-Significant Effect |
| Error | 5.092828 | 0.3637734 | 14 | | | |
| Total | 5.718257 | 0.9892026 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.936 | 8.885 | 0.1787 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9662 | | 0.7747 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-004 | 8 | 2.646 | 2.366 | 2.927 | 1.247 | 3.594 | 0.1368 | 0.7367 | 27.84% | -17.57% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-8662-1128 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 19.09% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | -3.941 | 1.761 | 0.4297 | 0.9993 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.536 | 2.586 | 0.0644 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.69889 | 3.69889 | 1 | 15.53 | 0.0015 | Significant Effect |
| Error | 3.333529 | 0.2381092 | 14 | | | |
| Total | 7.032418 | 3.936999 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.576 | 8.885 | 0.5630 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8982 | | 0.0753 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-002 | 8 | 3.212 | 3.007 | 3.418 | 2.747 | 4.408 | 0.1002 | 0.5398 | 16.8% | -42.72% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-2509-4126 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.16% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | -1.903 | 1.761 | 0.3864 | 0.9611 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.112 | 2.586 | 0.3694 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.6968076 | 0.6968076 | 1 | 3.62 | 0.0778 | Non-Significant Effect |
| Error | 2.694544 | 0.1924675 | 14 | | | |
| Total | 3.391352 | 0.8892751 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.082 | 8.885 | 0.9195 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9344 | | 0.2857 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 0.0% |
| 19830-001 | 8 | 2.668 | 2.498 | 2.838 | 1.773 | 3.115 | 0.08306 | 0.4473 | 16.76% | -18.54% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-1031-7338 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 0.41 | 1.761 | 0.3775 | 0.3440 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.754 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03088811 | 0.03088811 | 1 | 0.1681 | 0.6880 | Non-Significant Effect |
| Error | 2.572962 | 0.183783 | 14 | | | |
| Total | 2.60385 | 0.2146711 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.387 | 8.885 | 0.1299 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9243 | | 0.1979 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-017 | 8 | 2.668 | 2.466 | 2.871 | 2.134 | 3.395 | 0.09892 | 0.5327 | 19.96% | 3.19% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-7848-3174 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.47% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 1.357 | 1.761 | 0.2885 | 0.0981 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.025 | 2.586 | 0.4933 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1975803 | 0.1975803 | 1 | 1.841 | 0.1963 | Non-Significant Effect |
| Error | 1.502387 | 0.1073133 | 14 | | | |
| Total | 1.699967 | 0.3048936 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.561 | 8.885 | 0.5710 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9837 | | 0.9860 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-016 | 8 | 2.534 | 2.397 | 2.672 | 1.935 | 3.175 | 0.06717 | 0.3617 | 14.27% | 8.06% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3942-1204 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.03% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | -0.03186 | 1.761 | 0.3041 | 0.5125 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.996 | 2.586 | 0.5406 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0001209982 | 0.0001209982 | 1 | 0.001015 | 0.9750 | Non-Significant Effect |
| Error | 1.669177 | 0.1192269 | 14 | | | |
| Total | 1.669298 | 0.1193479 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.846 | 8.885 | 0.4374 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9469 | | 0.4417 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-015 | 8 | 2.762 | 2.612 | 2.911 | 2.096 | 3.205 | 0.07303 | 0.3933 | 14.24% | -0.2% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-2341-6440 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.48% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 0.537 | 1.761 | 0.3163 | 0.2999 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.461 | 2.586 | 0.0921 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03720077 | 0.03720077 | 1 | 0.2883 | 0.5997 | Non-Significant Effect |
| Error | 1.806347 | 0.1290248 | 14 | | | |
| Total | 1.843548 | 0.1662256 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.08 | 8.885 | 0.3550 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9328 | | 0.2700 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-014 | 8 | 2.66 | 2.501 | 2.819 | 2.174 | 3.514 | 0.07752 | 0.4174 | 15.69% | 3.5% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-1455-7970 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 12:00 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.98% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | -0.3108 | 1.761 | 0.3301 | 0.6197 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.294 | 2.586 | 0.1890 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01357228 | 0.01357228 | 1 | 0.09659 | 0.7605 | Non-Significant Effect |
| Error | 1.96728 | 0.14052 | 14 | | | |
| Total | 1.980853 | 0.1540923 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.354 | 8.885 | 0.2813 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.957 | | 0.6086 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-013 | 8 | 2.815 | 2.646 | 2.984 | 1.984 | 3.349 | 0.08247 | 0.4441 | 15.78% | -2.11% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-7940-1094 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.75% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | 0.9877 | 1.761 | 0.3239 | 0.1700 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.96 | 2.586 | 0.6054 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1319505 | 0.1319505 | 1 | 0.9755 | 0.3401 | Non-Significant Effect |
| Error | 1.893749 | 0.1352678 | 14 | | | |
| Total | 2.0257 | 0.2672183 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.229 | 8.885 | 0.3123 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9499 | | 0.4887 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-011 | 8 | 2.575 | 2.41 | 2.739 | 2.006 | 3.271 | 0.08025 | 0.4321 | 16.78% | 6.59% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-5210-5069 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.69% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 5.798 | 1.761 | 0.2946 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.422 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.761661 | 3.761661 | 1 | 33.61 | <0.0001 | Significant Effect |
| Error | 1.566776 | 0.1119126 | 14 | | | |
| Total | 5.328436 | 3.873573 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.671 | 8.885 | 0.5143 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9034 | | 0.0911 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-007 | 8 | 1.787 | 1.644 | 1.929 | 1.327 | 2.246 | 0.06949 | 0.3742 | 20.95% | 35.18% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-4522-2818 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 10.91% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 3.056 | 1.761 | 0.3007 | 0.0043 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.68 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.088892 | 1.088892 | 1 | 9.337 | 0.0086 | Significant Effect |
| Error | 1.632746 | 0.1166247 | 14 | | | |
| Total | 2.721638 | 1.205517 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.784 | 8.885 | 0.4630 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9617 | | 0.6934 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-006 | 8 | 2.235 | 2.088 | 2.382 | 1.707 | 2.789 | 0.07179 | 0.3866 | 17.3% | 18.93% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-9668-6577 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.69% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 3.168 | 1.761 | 0.4875 | 0.0034 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.85 | 2.586 | 0.8339 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.075639 | 3.075639 | 1 | 10.04 | 0.0068 | Significant Effect |
| Error | 4.290164 | 0.3064403 | 14 | | | |
| Total | 7.365803 | 3.38208 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.314 | 8.885 | 0.0266 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9069 | | 0.1038 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-005 | 8 | 1.879 | 1.603 | 2.156 | 1.182 | 2.869 | 0.1351 | 0.7274 | 38.7% | 31.81% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-7360-8550 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.88% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | 0.3934 | 1.761 | 0.4929 | 0.3500 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.588 | 2.586 | 0.0494 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04847004 | 0.04847004 | 1 | 0.1547 | 0.7000 | Non-Significant Effect |
| Error | 4.38538 | 0.3132414 | 14 | | | |
| Total | 4.43385 | 0.3617114 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.477 | 8.885 | 0.0248 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.945 | | 0.4143 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-004 | 8 | 2.646 | 2.366 | 2.927 | 1.247 | 3.594 | 0.1368 | 0.7367 | 27.84% | 3.99% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-4471-8737 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.52% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | -0.427 | 1.771 | 0.3725 | 0.6618 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03011902 | 0.03011902 | 1 | 0.1823 | 0.6764 | Non-Significant Effect |
| Error | 2.147634 | 0.1652026 | 13 | | | |
| Total | 2.177752 | 0.1953216 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.105 | 9.155 | 0.1641 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.976 | | 0.9347 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-004 | 7 | 2.846 | 2.652 | 3.04 | 2.119 | 3.594 | 0.09472 | 0.5101 | 17.92% | -3.26% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | Outlier | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0403-7458 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.84% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | -2.106 | 1.761 | 0.3814 | 0.9731 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.857 | 2.586 | 0.0096 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.8321998 | 0.8321998 | 1 | 4.437 | 0.0537 | Non-Significant Effect |
| Error | 2.62608 | 0.1875772 | 14 | | | |
| Total | 3.45828 | 1.019777 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.477 | 8.885 | 0.1223 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8719 | | 0.0291 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-002 | 8 | 3.212 | 3.007 | 3.418 | 2.747 | 4.408 | 0.1002 | 0.5398 | 16.8% | -16.55% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-4474-9669 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 9.19% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | -1.995 | 1.771 | 0.2533 | 0.9663 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3039623 | 0.3039623 | 1 | 3.981 | 0.0674 | Non-Significant Effect |
| Error | 0.9926854 | 0.07636042 | 13 | | | |
| Total | 1.296648 | 0.3803227 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.238 | 10.79 | 0.8107 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9019 | | 0.1019 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-002 | 7 | 3.042 | 2.943 | 3.141 | 2.747 | 3.38 | 0.04831 | 0.2602 | 8.55% | -10.35% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-002 | 2.76 | 3.18 | Outlier | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-2428-3989 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.04% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | 0.4678 | 1.761 | 0.3318 | 0.3236 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.46 | 2.586 | 0.0928 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.03106404 | 0.03106404 | 1 | 0.2189 | 0.6471 | Non-Significant Effect |
| Error | 1.987096 | 0.1419354 | 14 | | | |
| Total | 2.01816 | 0.1729994 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.388 | 8.885 | 0.2735 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9148 | | 0.1393 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-001 | 8 | 2.668 | 2.498 | 2.838 | 1.773 | 3.115 | 0.08306 | 0.4473 | 16.76% | 3.2% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0297-8204 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.71% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | 2.759 | 1.761 | 0.3228 | 0.0077 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.554 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.022121 | 1.022121 | 1 | 7.609 | 0.0154 | Significant Effect |
| Error | 1.880537 | 0.1343241 | 14 | | | |
| Total | 2.902658 | 1.156445 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.206 | 8.885 | 0.3183 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9274 | | 0.2216 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.0% |
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 18.34% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-7558-3069 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 19.01% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 0.06996 | 1.761 | 0.5113 | 0.4726 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.742 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001649476 | 0.001649476 | 1 | 0.004894 | 0.9452 | Non-Significant Effect |
| Error | 4.718408 | 0.3370291 | 14 | | | |
| Total | 4.720057 | 0.3386786 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.375 | 8.885 | 0.6847 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9046 | | 0.0954 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-017 | 8 | 2.668 | 2.466 | 2.871 | 2.134 | 3.395 | 0.09892 | 0.5327 | 19.96% | 0.76% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-0457-1469 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.72% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 0.6061 | 1.761 | 0.4495 | 0.2771 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.982 | 2.586 | 0.5657 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.09570587 | 0.09570587 | 1 | 0.3673 | 0.5542 | Non-Significant Effect |
| Error | 3.647832 | 0.2605594 | 14 | | | |
| Total | 3.743538 | 0.3562653 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.983 | 8.885 | 0.1726 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9608 | | 0.6768 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-016 | 8 | 2.534 | 2.397 | 2.672 | 1.935 | 3.175 | 0.06717 | 0.3617 | 14.27% | 5.75% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-0170-1840 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | -0.28 | 1.761 | 0.4597 | 0.6082 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.938 | 2.586 | 0.6466 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02135582 | 0.02135582 | 1 | 0.07838 | 0.7836 | Non-Significant Effect |
| Error | 3.814622 | 0.272473 | 14 | | | |
| Total | 3.835978 | 0.2938288 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.523 | 8.885 | 0.2451 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.962 | | 0.6986 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-015 | 8 | 2.762 | 2.612 | 2.911 | 2.096 | 3.205 | 0.07303 | 0.3933 | 14.24% | -2.72% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-5287-3182 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 0.1087 | 1.761 | 0.4679 | 0.4575 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.904 | 2.586 | 0.7150 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.00333375 | 0.00333375 | 1 | 0.01181 | 0.9150 | Non-Significant Effect |
| Error | 3.951793 | 0.2822709 | 14 | | | |
| Total | 3.955127 | 0.2856047 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.24 | 8.885 | 0.3094 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9433 | | 0.3913 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-014 | 8 | 2.66 | 2.501 | 2.819 | 2.174 | 3.514 | 0.07752 | 0.4174 | 15.69% | 1.07% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2798-0497 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:59 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.75% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | -0.4643 | 1.761 | 0.4773 | 0.6752 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.866 | 2.586 | 0.7970 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06332094 | 0.06332094 | 1 | 0.2155 | 0.6496 | Non-Significant Effect |
| Error | 4.112726 | 0.2937661 | 14 | | | |
| Total | 4.176047 | 0.3570871 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.979 | 8.885 | 0.3880 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9773 | | 0.9387 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-013 | 8 | 2.815 | 2.646 | 2.984 | 1.984 | 3.349 | 0.08247 | 0.4441 | 15.78% | -4.68% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-0038-4432 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.59% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 0.4247 | 1.761 | 0.473 | 0.3388 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.883 | 2.586 | 0.7594 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.05203577 | 0.05203577 | 1 | 0.1804 | 0.6775 | Non-Significant Effect |
| Error | 4.039195 | 0.2885139 | 14 | | | |
| Total | 4.091231 | 0.3405497 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.09 | 8.885 | 0.3518 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9492 | | 0.4764 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-011 | 8 | 2.575 | 2.41 | 2.739 | 2.006 | 3.271 | 0.08025 | 0.4321 | 16.78% | 4.24% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-7507-6455 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.87% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-007 | 3.504 | 1.761 | 0.4535 | 0.0018 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.964 | 2.586 | 0.5966 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.255728 | 3.255728 | 1 | 12.28 | 0.0035 | Significant Effect |
| Error | 3.712221 | 0.2651587 | 14 | | | |
| Total | 6.96795 | 3.520887 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.787 | 8.885 | 0.1997 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9559 | | 0.5883 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-007 | 8 | 1.787 | 1.644 | 1.929 | 1.327 | 2.246 | 0.06949 | 0.3742 | 20.95% | 33.55% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-3081-1232 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.01% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-006 | 1.749 | 1.761 | 0.4575 | 0.0511 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.947 | 2.586 | 0.6287 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.8251243 | 0.8251243 | 1 | 3.057 | 0.1022 | Non-Significant Effect |
| Error | 3.778192 | 0.2698708 | 14 | | | |
| Total | 4.603316 | 1.094995 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.611 | 8.885 | 0.2286 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9621 | | 0.7000 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-006 | 8 | 2.235 | 2.088 | 2.382 | 1.707 | 2.789 | 0.07179 | 0.3866 | 17.3% | 16.89% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-7592-2379 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 22.21% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | Ties | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 51 | | 0 | 0.0415 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.511 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 2.61991 | 2.61991 | 1 | 5.699 | 0.0316 | Significant Effect |
| Error | 6.435609 | 0.4596864 | 14 | | | |
| Total | 9.055519 | 3.079597 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.356 | 8.885 | 0.6982 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.834 | | 0.0080 | Non-normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-005 | 8 | 1.879 | 1.603 | 2.156 | 1.182 | 2.869 | 0.1351 | 0.7274 | 38.7% | 30.1% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-8949-5886 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 22.37% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 0.1245 | 1.761 | 0.6015 | 0.4514 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.121 | 2.586 | 0.3589 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.007228862 | 0.007228862 | 1 | 0.0155 | 0.9027 | Non-Significant Effect |
| Error | 6.530825 | 0.4664875 | 14 | | | |
| Total | 6.538054 | 0.4737163 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.391 | 8.885 | 0.6745 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9689 | | 0.8210 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-004 | 8 | 2.646 | 2.366 | 2.927 | 1.247 | 3.594 | 0.1368 | 0.7367 | 27.84% | 1.58% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2000-9056 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 19.12% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | -1.794 | 1.761 | 0.5141 | 0.9528 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.12 | 2.586 | 0.3601 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.097018 | 1.097018 | 1 | 3.219 | 0.0944 | Non-Significant Effect |
| Error | 4.771526 | 0.3408233 | 14 | | | |
| Total | 5.868544 | 1.437841 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.34 | 8.885 | 0.7095 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9206 | | 0.1728 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-002 | 8 | 3.212 | 3.007 | 3.418 | 2.747 | 4.408 | 0.1002 | 0.5398 | 16.8% | -19.48% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-5874-4103 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.79% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 0.07567 | 1.761 | 0.4785 | 0.4704 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.862 | 2.586 | 0.8072 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001690322 | 0.001690322 | 1 | 0.005726 | 0.9408 | Non-Significant Effect |
| Error | 4.132541 | 0.2951815 | 14 | | | |
| Total | 4.134232 | 0.2968718 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.951 | 8.885 | 0.3978 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.979 | | 0.9553 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-001 | 8 | 2.668 | 2.498 | 2.838 | 1.773 | 3.115 | 0.08306 | 0.4473 | 16.76% | 0.76% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-8423-3562 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.56% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 1.633 | 1.761 | 0.4723 | 0.0623 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.886 | 2.586 | 0.7526 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.767137 | 0.767137 | 1 | 2.668 | 0.1247 | Non-Significant Effect |
| Error | 4.025982 | 0.2875702 | 14 | | | |
| Total | 4.793119 | 1.054707 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.111 | 8.885 | 0.3453 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9338 | | 0.2803 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 16.29% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-4676-1063 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.95% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | -0.2776 | 1.761 | 0.4288 | 0.6073 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.078 | 2.586 | 0.4154 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01826185 | 0.01826185 | 1 | 0.07704 | 0.7854 | Non-Significant Effect |
| Error | 3.318534 | 0.2370381 | 14 | | | |
| Total | 3.336796 | 0.2553 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.658 | 8.885 | 0.0599 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9717 | | 0.8656 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 0.0% |
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | -2.51% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-3436-0348 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 19.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | -0.3074 | 1.761 | 0.4957 | 0.6184 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.922 | 2.586 | 0.6784 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02992896 | 0.02992896 | 1 | 0.09446 | 0.7631 | Non-Significant Effect |
| Error | 4.435592 | 0.316828 | 14 | | | |
| Total | 4.465521 | 0.346757 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.233 | 8.885 | 0.7894 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9321 | | 0.2628 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-017 | 8 | 2.668 | 2.466 | 2.871 | 2.134 | 3.395 | 0.09892 | 0.5327 | 19.96% | -3.35% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-1066-2475 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.72% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 0.1953 | 1.761 | 0.4318 | 0.4240 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.206 | 2.586 | 0.2642 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.009168069 | 0.009168069 | 1 | 0.03814 | 0.8480 | Non-Significant Effect |
| Error | 3.365017 | 0.2403584 | 14 | | | |
| Total | 3.374185 | 0.2495264 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.674 | 8.885 | 0.2177 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9638 | | 0.7301 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-016 | 8 | 2.534 | 2.397 | 2.672 | 1.935 | 3.175 | 0.06717 | 0.3617 | 14.27% | 1.85% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-7892-3761 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.13% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | -0.7163 | 1.761 | 0.4423 | 0.7572 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.154 | 2.586 | 0.3198 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.12942 | 0.12942 | 1 | 0.513 | 0.4856 | Non-Significant Effect |
| Error | 3.531807 | 0.252272 | 14 | | | |
| Total | 3.661227 | 0.381692 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.262 | 8.885 | 0.3036 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.958 | | 0.6261 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-015 | 8 | 2.762 | 2.612 | 2.911 | 2.096 | 3.205 | 0.07303 | 0.3933 | 14.24% | -6.97% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-7171-6067 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | -0.3045 | 1.761 | 0.4508 | 0.6174 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.113 | 2.586 | 0.3685 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02429701 | 0.02429701 | 1 | 0.09271 | 0.7652 | Non-Significant Effect |
| Error | 3.668978 | 0.2620698 | 14 | | | |
| Total | 3.693275 | 0.2863668 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.008 | 8.885 | 0.3781 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9488 | | 0.4713 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-014 | 8 | 2.66 | 2.501 | 2.819 | 2.174 | 3.514 | 0.07752 | 0.4174 | 15.69% | -3.02% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-3142-4583 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:58 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.84% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | -0.8895 | 1.761 | 0.4606 | 0.8056 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.068 | 2.586 | 0.4287 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2164577 | 0.2164577 | 1 | 0.7912 | 0.3888 | Non-Significant Effect |
| Error | 3.829911 | 0.2735651 | 14 | | | |
| Total | 4.046369 | 0.4900228 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.774 | 8.885 | 0.4673 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9672 | | 0.7915 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-013 | 8 | 2.815 | 2.646 | 2.984 | 1.984 | 3.349 | 0.08247 | 0.4441 | 15.78% | -9.01% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8143-1016 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.67% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 0.02799 | 1.761 | 0.4562 | 0.4890 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.088 | 2.586 | 0.4008 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0002102463 | 0.0002102463 | 1 | 0.0007836 | 0.9781 | Non-Significant Effect |
| Error | 3.75638 | 0.2683128 | 14 | | | |
| Total | 3.75659 | 0.2685231 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.874 | 8.885 | 0.4264 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9644 | | 0.7420 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-011 | 8 | 2.575 | 2.41 | 2.739 | 2.006 | 3.271 | 0.08025 | 0.4321 | 16.78% | 0.28% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1704-6787 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.88% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 3.214 | 1.761 | 0.4359 | 0.0031 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.186 | 2.586 | 0.2852 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 2.530486 | 2.530486 | 1 | 10.33 | 0.0062 | Significant Effect |
| Error | 3.429406 | 0.2449576 | 14 | | | |
| Total | 5.959892 | 2.775443 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.499 | 8.885 | 0.2500 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9509 | | 0.5044 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-007 | 8 | 1.787 | 1.644 | 1.929 | 1.327 | 2.246 | 0.06949 | 0.3742 | 20.95% | 30.8% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2724-6171 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.04% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | 1.39 | 1.761 | 0.44 | 0.0931 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.165 | 2.586 | 0.3073 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.4826775 | 0.4826775 | 1 | 1.933 | 0.1861 | Non-Significant Effect |
| Error | 3.495376 | 0.2496697 | 14 | | | |
| Total | 3.978054 | 0.7323472 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.341 | 8.885 | 0.2843 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9504 | | 0.4953 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-006 | 8 | 2.235 | 2.088 | 2.382 | 1.707 | 2.789 | 0.07179 | 0.3866 | 17.3% | 13.45% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-8955-7817 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 22.61% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 2.119 | 1.761 | 0.5838 | 0.0262 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.632 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.974025 | 1.974025 | 1 | 4.492 | 0.0524 | Non-Significant Effect |
| Error | 6.152794 | 0.4394853 | 14 | | | |
| Total | 8.12682 | 2.41351 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.512 | 8.885 | 0.5988 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8653 | | 0.0230 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-005 | 8 | 1.879 | 1.603 | 2.156 | 1.182 | 2.869 | 0.1351 | 0.7274 | 38.7% | 27.21% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8450-3383 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 22.79% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | -0.1925 | 1.761 | 0.5883 | 0.5749 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.168 | 2.586 | 0.3037 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01653562 | 0.01653562 | 1 | 0.03705 | 0.8501 | Non-Significant Effect |
| Error | 6.24801 | 0.4462864 | 14 | | | |
| Total | 6.264546 | 0.462822 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.551 | 8.885 | 0.5767 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9692 | | 0.8258 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-004 | 8 | 2.646 | 2.366 | 2.927 | 1.247 | 3.594 | 0.1368 | 0.7367 | 27.84% | -2.49% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-0338-3988 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 19.31% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | -2.227 | 1.761 | 0.4987 | 0.9786 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.185 | 2.586 | 0.2853 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.590121 | 1.590121 | 1 | 4.959 | 0.0429 | Significant Effect |
| Error | 4.48871 | 0.3206222 | 14 | | | |
| Total | 6.078831 | 1.910743 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.201 | 8.885 | 0.8154 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9096 | | 0.1148 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-002 | 8 | 3.212 | 3.007 | 3.418 | 2.747 | 4.408 | 0.1002 | 0.5398 | 16.8% | -24.42% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-5988-8310 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.89% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | -0.329 | 1.761 | 0.4618 | 0.6265 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.063 | 2.586 | 0.4363 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02975629 | 0.02975629 | 1 | 0.1082 | 0.7471 | Non-Significant Effect |
| Error | 3.849726 | 0.2749804 | 14 | | | |
| Total | 3.879482 | 0.3047367 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.749 | 8.885 | 0.4783 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9651 | | 0.7536 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-001 | 8 | 2.668 | 2.498 | 2.838 | 1.773 | 3.115 | 0.08306 | 0.4473 | 16.76% | -3.34% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-0839-8909 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 17.64% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 1.281 | 1.761 | 0.4554 | 0.1105 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.092 | 2.586 | 0.3959 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.438575 | 0.438575 | 1 | 1.64 | 0.2211 | Non-Significant Effect |
| Error | 3.743167 | 0.2673691 | 14 | | | |
| Total | 4.181742 | 0.7059441 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.893 | 8.885 | 0.4191 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9537 | | 0.5498 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 12.82% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-1113-6838 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.88% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | -0.7489 | 1.761 | 0.4101 | 0.7669 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.323 | 2.586 | 0.1679 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1216266 | 0.1216266 | 1 | 0.5609 | 0.4663 | Non-Significant Effect |
| Error | 3.035719 | 0.216837 | 14 | | | |
| Total | 3.157345 | 0.3384636 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.176 | 8.885 | 0.0788 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9672 | | 0.7907 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | -6.75% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-6372-2429 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 20.75% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -0.3511 | 1.761 | 0.5357 | 0.6346 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.778 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04563078 | 0.04563078 | 1 | 0.1233 | 0.7307 | Non-Significant Effect |
| Error | 5.181164 | 0.3700832 | 14 | | | |
| Total | 5.226795 | 0.4157139 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.115 | 8.885 | 0.8891 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9333 | | 0.2747 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 0.0% |
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | -4.14% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3510-6271 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.96% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 0.4402 | 1.761 | 0.4146 | 0.3332 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.687 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04295259 | 0.04295259 | 1 | 0.1938 | 0.6665 | Non-Significant Effect |
| Error | 3.102987 | 0.2216419 | 14 | | | |
| Total | 3.145939 | 0.2645945 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.779 | 8.885 | 0.4650 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9618 | | 0.6952 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-017 | 8 | 2.668 | 2.466 | 2.871 | 2.134 | 3.395 | 0.09892 | 0.5327 | 19.96% | 3.74% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-4447-3952 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 1.249 | 1.761 | 0.3355 | 0.1160 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.084 | 2.586 | 0.4065 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.226576 | 0.226576 | 1 | 1.561 | 0.2320 | Non-Significant Effect |
| Error | 2.032412 | 0.1451723 | 14 | | | |
| Total | 2.258988 | 0.3717483 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.219 | 8.885 | 0.8004 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9677 | | 0.8008 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-016 | 8 | 2.534 | 2.397 | 2.672 | 1.935 | 3.175 | 0.06717 | 0.3617 | 14.27% | 8.59% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-8216-2714 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.59% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 0.05172 | 1.761 | 0.349 | 0.4797 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.003 | 2.586 | 0.5283 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0004202502 | 0.0004202502 | 1 | 0.002675 | 0.9595 | Non-Significant Effect |
| Error | 2.199202 | 0.1570858 | 14 | | | |
| Total | 2.199622 | 0.1575061 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.031 | 8.885 | 0.9686 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9339 | | 0.2810 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-015 | 8 | 2.762 | 2.612 | 2.911 | 2.096 | 3.205 | 0.07303 | 0.3933 | 14.24% | 0.37% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-9829-3234 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:57 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.98% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 0.5492 | 1.761 | 0.3598 | 0.2957 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.164 | 2.586 | 0.3081 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.05034412 | 0.05034412 | 1 | 0.3017 | 0.5915 | Non-Significant Effect |
| Error | 2.336372 | 0.1668837 | 14 | | | |
| Total | 2.386716 | 0.2172278 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.092 | 8.885 | 0.9101 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9838 | | 0.9867 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-014 | 8 | 2.66 | 2.501 | 2.819 | 2.174 | 3.514 | 0.07752 | 0.4174 | 15.69% | 4.05% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-6836-7880 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.42% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -0.2013 | 1.761 | 0.3719 | 0.5783 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.036 | 2.586 | 0.4766 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.007225037 | 0.007225037 | 1 | 0.0405 | 0.8434 | Non-Significant Effect |
| Error | 2.497305 | 0.178379 | 14 | | | |
| Total | 2.50453 | 0.185604 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.237 | 8.885 | 0.7865 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9281 | | 0.2276 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-013 | 8 | 2.815 | 2.646 | 2.984 | 1.984 | 3.349 | 0.08247 | 0.4441 | 15.78% | -1.53% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-6019-4967 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.22% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | 0.9487 | 1.761 | 0.3664 | 0.1794 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.908 | 2.586 | 0.7056 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1558274 | 0.1558274 | 1 | 0.9001 | 0.3589 | Non-Significant Effect |
| Error | 2.423774 | 0.1731267 | 14 | | | |
| Total | 2.579602 | 0.3289542 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.171 | 8.885 | 0.8406 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9838 | | 0.9866 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-011 | 8 | 2.575 | 2.41 | 2.739 | 2.006 | 3.271 | 0.08025 | 0.4321 | 16.78% | 7.12% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-5165-5638 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.29% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 5.093 | 1.761 | 0.3408 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.052 | 2.586 | 0.4523 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.884841 | 3.884841 | 1 | 25.94 | 0.0002 | Significant Effect |
| Error | 2.096801 | 0.1497715 | 14 | | | |
| Total | 5.981642 | 4.034613 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.139 | 8.885 | 0.8680 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9528 | | 0.5351 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-007 | 8 | 1.787 | 1.644 | 1.929 | 1.327 | 2.246 | 0.06949 | 0.3742 | 20.95% | 35.55% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-2597-6864 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.49% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 2.735 | 1.761 | 0.3461 | 0.0081 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.02 | 2.586 | 0.5009 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.155625 | 1.155625 | 1 | 7.481 | 0.0161 | Significant Effect |
| Error | 2.162771 | 0.1544836 | 14 | | | |
| Total | 3.318396 | 1.310108 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.067 | 8.885 | 0.9338 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.96 | | 0.6617 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-006 | 8 | 2.235 | 2.088 | 2.382 | 1.707 | 2.789 | 0.07179 | 0.3866 | 17.3% | 19.39% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-1639-9410 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.64% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 3.043 | 1.761 | 0.5167 | 0.0044 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.746 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.187118 | 3.187118 | 1 | 9.257 | 0.0088 | Significant Effect |
| Error | 4.820189 | 0.3442992 | 14 | | | |
| Total | 8.007307 | 3.531417 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.317 | 8.885 | 0.1363 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9291 | | 0.2359 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-005 | 8 | 1.879 | 1.603 | 2.156 | 1.182 | 2.869 | 0.1351 | 0.7274 | 38.7% | 32.2% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-0047-9610 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.82% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | 0.4247 | 1.761 | 0.5218 | 0.3387 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.444 | 2.586 | 0.0995 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.06333227 | 0.06333227 | 1 | 0.1804 | 0.6775 | Non-Significant Effect |
| Error | 4.915404 | 0.3511003 | 14 | | | |
| Total | 4.978736 | 0.4144326 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.402 | 8.885 | 0.1286 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.954 | | 0.5557 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-004 | 8 | 2.646 | 2.366 | 2.927 | 1.247 | 3.594 | 0.1368 | 0.7367 | 27.84% | 4.54% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-3460-4049 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.08% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -1.855 | 1.761 | 0.4181 | 0.9576 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.606 | 2.586 | 0.0449 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.7757205 | 0.7757205 | 1 | 3.441 | 0.0848 | Non-Significant Effect |
| Error | 3.156105 | 0.2254361 | 14 | | | |
| Total | 3.931826 | 1.001157 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.827 | 8.885 | 0.4451 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.938 | | 0.3256 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-002 | 8 | 3.212 | 3.007 | 3.418 | 2.747 | 4.408 | 0.1002 | 0.5398 | 16.8% | -15.89% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-5471-5822 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.32% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -1.522 | 1.771 | 0.3137 | 0.9240 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2713326 | 0.2713326 | 1 | 2.316 | 0.1520 | Non-Significant Effect |
| Error | 1.52271 | 0.1171316 | 13 | | | |
| Total | 1.794043 | 0.3884641 | 14 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.356 | 10.79 | 0.3161 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.957 | | 0.6410 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-002 | 7 | 3.042 | 2.943 | 3.141 | 2.747 | 3.38 | 0.04831 | 0.2602 | 8.55% | -9.73% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-002 | 2.76 | 3.18 | Outlier | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-5990-2850 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.47% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | 0.49 | 1.761 | 0.3734 | 0.3159 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.185 | 2.586 | 0.2852 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.04316 | 0.04316 | 1 | 0.2401 | 0.6318 | Non-Significant Effect |
| Error | 2.517121 | 0.1797943 | 14 | | | |
| Total | 2.560281 | 0.2229543 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.254 | 8.885 | 0.7726 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.908 | | 0.1079 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-001 | 8 | 2.668 | 2.498 | 2.838 | 1.773 | 3.115 | 0.08306 | 0.4473 | 16.76% | 3.75% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-9196-3466 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.18% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | 2.512 | 1.761 | 0.3654 | 0.0124 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.914 | 2.586 | 0.6948 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.086806 | 1.086806 | 1 | 6.312 | 0.0249 | Significant Effect |
| Error | 2.410562 | 0.172183 | 14 | | | |
| Total | 3.497368 | 1.258989 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.159 | 8.885 | 0.8507 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9476 | | 0.4531 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 18.8% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-8554-4427 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.08% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | 0.09031 | 1.761 | 0.3072 | 0.4647 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.277 | 2.586 | 0.2021 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0009922452 | 0.0009922452 | 1 | 0.008156 | 0.9293 | Non-Significant Effect |
| Error | 1.703113 | 0.1216509 | 14 | | | |
| Total | 1.704105 | 0.1226432 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.904 | 8.885 | 0.4150 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9671 | | 0.7895 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 0.57% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-6118-3712 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | 0.3178 | 1.761 | 0.4617 | 0.3777 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.929 | 2.586 | 0.6634 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02776766 | 0.02776766 | 1 | 0.101 | 0.7553 | Non-Significant Effect |
| Error | 3.848559 | 0.274897 | 14 | | | |
| Total | 3.876326 | 0.3026647 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.447 | 8.885 | 0.2607 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9717 | | 0.8653 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 3.01% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2890-9796 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.03% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | 0.7535 | 1.761 | 0.4444 | 0.2318 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.143 | 2.586 | 0.3316 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.14459 | 0.14459 | 1 | 0.5677 | 0.4637 | Non-Significant Effect |
| Error | 3.565743 | 0.254696 | 14 | | | |
| Total | 3.710333 | 0.399286 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.193 | 8.885 | 0.3218 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9544 | | 0.5630 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 0.0% |
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 6.86% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-0138-7878 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 14.95% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 0.6983 | 1.761 | 0.4241 | 0.2482 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.673 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1130489 | 0.1130489 | 1 | 0.4876 | 0.4965 | Non-Significant Effect |
| Error | 3.246115 | 0.2318653 | 14 | | | |
| Total | 3.359164 | 0.3449143 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.577 | 8.885 | 0.5625 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9041 | | 0.0935 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-017 | 8 | 2.668 | 2.466 | 2.871 | 2.134 | 3.395 | 0.09892 | 0.5327 | 19.96% | 5.93% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-017 | 2.284 | 3.395 | 3.385 | 2.632 | 3.035 | 2.317 | 2.166 | 2.134 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-0688-6949 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.24% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 1.535 | 1.761 | 0.3472 | 0.0736 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.044 | 2.586 | 0.4642 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.3659976 | 0.3659976 | 1 | 2.355 | 0.1471 | Non-Significant Effect |
| Error | 2.17554 | 0.1553957 | 14 | | | |
| Total | 2.541537 | 0.5213934 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.375 | 8.885 | 0.6846 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9602 | | 0.6652 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-016 | 8 | 2.534 | 2.397 | 2.672 | 1.935 | 3.175 | 0.06717 | 0.3617 | 14.27% | 10.66% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-016 | 1.935 | 2.781 | 2.34 | 2.484 | 2.592 | 3.175 | 2.618 | 2.348 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-9935-2213 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 0.3654 | 1.761 | 0.3602 | 0.3601 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.97 | 2.586 | 0.5867 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.0223435 | 0.0223435 | 1 | 0.1335 | 0.7202 | Non-Significant Effect |
| Error | 2.34233 | 0.1673093 | 14 | | | |
| Total | 2.364673 | 0.1896528 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.164 | 8.885 | 0.8467 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9859 | | 0.9936 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-015 | 8 | 2.762 | 2.612 | 2.911 | 2.096 | 3.205 | 0.07303 | 0.3933 | 14.24% | 2.64% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-015 | 2.096 | 3.094 | 3.18 | 3.205 | 2.78 | 2.714 | 2.638 | 2.388 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2341-3763 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:56 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.07% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 0.8396 | 1.761 | 0.3706 | 0.2076 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.101 | 2.586 | 0.3843 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1248579 | 0.1248579 | 1 | 0.705 | 0.4152 | Non-Significant Effect |
| Error | 2.4795 | 0.1771072 | 14 | | | |
| Total | 2.604358 | 0.3019651 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.033 | 8.885 | 0.9672 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9237 | | 0.1933 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-014 | 8 | 2.66 | 2.501 | 2.819 | 2.174 | 3.514 | 0.07752 | 0.4174 | 15.69% | 6.23% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-014 | 2.174 | 2.428 | 2.673 | 3.514 | 2.809 | 2.873 | 2.37 | 2.439 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-3963-7471 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.48% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | 0.1013 | 1.761 | 0.3825 | 0.4604 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.98 | 2.586 | 0.5689 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.001933994 | 0.001933994 | 1 | 0.01025 | 0.9208 | Non-Significant Effect |
| Error | 2.640433 | 0.1886024 | 14 | | | |
| Total | 2.642367 | 0.1905364 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.096 | 8.885 | 0.9068 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9919 | | 0.9998 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-013 | 8 | 2.815 | 2.646 | 2.984 | 1.984 | 3.349 | 0.08247 | 0.4441 | 15.78% | 0.78% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-013 | 2.929 | 2.443 | 2.665 | 2.853 | 3.349 | 1.984 | 3.079 | 3.215 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-1078-2809 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.29% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 1.223 | 1.761 | 0.3771 | 0.1207 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.882 | 2.586 | 0.7626 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2742902 | 0.2742902 | 1 | 1.496 | 0.2415 | Non-Significant Effect |
| Error | 2.566902 | 0.1833502 | 14 | | | |
| Total | 2.841193 | 0.4576404 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.038 | 8.885 | 0.9623 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9512 | | 0.5085 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-011 | 8 | 2.575 | 2.41 | 2.739 | 2.006 | 3.271 | 0.08025 | 0.4321 | 16.78% | 9.23% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-011 | 2.353 | 2.653 | 2.943 | 3.271 | 2.877 | 2.283 | 2.006 | 2.212 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-0729-2990 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.42% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-007 | 5.25 | 1.761 | 0.3523 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.014 | 2.586 | 0.5105 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 4.409905 | 4.409905 | 1 | 27.56 | 0.0001 | Significant Effect |
| Error | 2.239929 | 0.1599949 | 14 | | | |
| Total | 6.649834 | 4.5699 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.285 | 8.885 | 0.7491 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9492 | | 0.4774 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-007 | 8 | 1.787 | 1.644 | 1.929 | 1.327 | 2.246 | 0.06949 | 0.3742 | 20.95% | 37.02% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-007 | 1.327 | 2 | 2.131 | 2.246 | 1.421 | 2.078 | 1.374 | 1.716 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-6452-7444 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-006 | 2.967 | 1.761 | 0.3574 | 0.0051 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.985 | 2.586 | 0.5593 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.449561 | 1.449561 | 1 | 8.801 | 0.0102 | Significant Effect |
| Error | 2.305899 | 0.1647071 | 14 | | | |
| Total | 3.75546 | 1.614268 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.204 | 8.885 | 0.8127 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9562 | | 0.5929 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-006 | 8 | 2.235 | 2.088 | 2.382 | 1.707 | 2.789 | 0.07179 | 0.3866 | 17.3% | 21.22% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-006 | 2.473 | 1.717 | 2.34 | 1.707 | 2.789 | 2.169 | 2.12 | 2.562 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-2537-2415 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.49% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 3.215 | 1.761 | 0.5244 | 0.0031 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.72 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 3.664267 | 3.664267 | 1 | 10.34 | 0.0062 | Significant Effect |
| Error | 4.963317 | 0.3545226 | 14 | | | |
| Total | 8.627584 | 4.018789 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.94 | 8.885 | 0.1781 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8713 | | 0.0285 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-005 | 8 | 1.879 | 1.603 | 2.156 | 1.182 | 2.869 | 0.1351 | 0.7274 | 38.7% | 33.74% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-005 | 1.431 | 2.682 | 2.869 | 1.395 | 1.182 | 1.381 | 1.395 | 2.701 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-5871-5802 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 18.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | 0.6332 | 1.761 | 0.5294 | 0.2684 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.41 | 2.586 | 0.1163 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1448841 | 0.1448841 | 1 | 0.401 | 0.5368 | Non-Significant Effect |
| Error | 5.058533 | 0.3613237 | 14 | | | |
| Total | 5.203417 | 0.5062078 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.016 | 8.885 | 0.1685 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9551 | | 0.5743 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-004 | 8 | 2.646 | 2.366 | 2.927 | 1.247 | 3.594 | 0.1368 | 0.7367 | 27.84% | 6.71% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-004 | 2.536 | 2.94 | 3.39 | 2.749 | 3.594 | 2.119 | 1.247 | 2.595 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-9547-9562 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.07% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | -1.549 | 1.761 | 0.4275 | 0.9281 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.549 | 2.586 | 0.0603 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.5651619 | 0.5651619 | 1 | 2.398 | 0.1438 | Non-Significant Effect |
| Error | 3.299233 | 0.2356595 | 14 | | | |
| Total | 3.864395 | 0.8008214 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.619 | 8.885 | 0.5403 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.8882 | | 0.0521 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-002 | 8 | 3.212 | 3.007 | 3.418 | 2.747 | 4.408 | 0.1002 | 0.5398 | 16.8% | -13.25% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-002 | 2.76 | 3.18 | 4.408 | 3.092 | 3.38 | 3.293 | 2.747 | 2.84 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-4087-7373 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.53% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 0.7725 | 1.761 | 0.3839 | 0.2263 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.126 | 2.586 | 0.3525 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.1133852 | 0.1133852 | 1 | 0.5967 | 0.4527 | Non-Significant Effect |
| Error | 2.660249 | 0.1900178 | 14 | | | |
| Total | 2.773634 | 0.303403 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.112 | 8.885 | 0.8924 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9858 | | 0.9933 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-001 | 8 | 2.668 | 2.498 | 2.838 | 1.773 | 3.115 | 0.08306 | 0.4473 | 16.76% | 5.94% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-001 | 2.712 | 3.049 | 2.782 | 3.115 | 2.462 | 1.773 | 3.035 | 2.418 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-5854-1335 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 13.26% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 2.743 | 1.761 | 0.3761 | 0.0079 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.887 | 2.586 | 0.7520 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 1.372359 | 1.372359 | 1 | 7.524 | 0.0159 | Significant Effect |
| Error | 2.55369 | 0.1824064 | 14 | | | |
| Total | 3.926049 | 1.554765 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.027 | 8.885 | 0.9726 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9489 | | 0.4728 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-012 | 8 | 2.251 | 2.087 | 2.414 | 1.745 | 2.801 | 0.07984 | 0.4299 | 19.1% | 20.65% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-012 | 2.282 | 2.718 | 1.777 | 2.664 | 2.801 | 1.96 | 1.745 | 2.06 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7796-1410 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 11.27% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 0.4419 | 1.761 | 0.3198 | 0.3327 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.219 | 2.586 | 0.2523 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.02575298 | 0.02575298 | 1 | 0.1953 | 0.6653 | Non-Significant Effect |
| Error | 1.846241 | 0.1318744 | 14 | | | |
| Total | 1.871994 | 0.1576273 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.148 | 8.885 | 0.3347 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9641 | | 0.7359 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-010 | 8 | 2.756 | 2.646 | 2.866 | 2.381 | 3.143 | 0.05375 | 0.2895 | 10.5% | 2.83% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-010 | 2.481 | 3.07 | 2.578 | 3.143 | 2.847 | 2.574 | 2.977 | 2.381 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0762-9377 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 16.58% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | 0.5536 | 1.761 | 0.4702 | 0.2943 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.894 | 2.586 | 0.7352 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.08738748 | 0.08738748 | 1 | 0.3065 | 0.5886 | Non-Significant Effect |
| Error | 3.991687 | 0.2851205 | 14 | | | |
| Total | 4.079074 | 0.372508 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.169 | 8.885 | 0.3287 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9533 | | 0.5439 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-009 | 8 | 2.689 | 2.451 | 2.926 | 1.945 | 3.666 | 0.116 | 0.6247 | 23.23% | 5.21% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-009 | 2.564 | 1.945 | 3.175 | 3.666 | 3.318 | 2.247 | 2.105 | 2.49 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-5134-7819 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:55 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 15.98% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 0.9894 | 1.761 | 0.4533 | 0.1696 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 2.102 | 2.586 | 0.3831 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.2593125 | 0.2593125 | 1 | 0.9788 | 0.3393 | Non-Significant Effect |
| Error | 3.708872 | 0.2649194 | 14 | | | |
| Total | 3.968184 | 0.5242319 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.944 | 8.885 | 0.4001 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9547 | | 0.5671 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-008 | 8 | 2.582 | 2.357 | 2.807 | 1.836 | 3.627 | 0.1098 | 0.5915 | 22.91% | 8.98% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-008 | 3.004 | 2.608 | 2.747 | 3.627 | 2.738 | 2.048 | 2.048 | 1.836 |

**Bioaccumulation Evaluation - Survival Endpoint** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-0935-9786 | **Endpoint:** | Wet Biomass - Mean | **CETIS Version:** | CETISv1.7.0 |
| **Analyzed:** | 09 Aug-10 11:54 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 19-8691-6246 | **Test Type:** | Survival-Growth | **Analyst:** | |
| **Start Date:** | 01 Jul-10 12:00 | **Protocol:** | ASTM E 1688 (2000a) | **Diluent:** | Not Applicable |
| **Ending Date:** | | **Species:** | Nereis virens | **Brine:** | Not Applicable |
| **Duration:** | N/A | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | Monte Carlo | NOEL | LOEL | TOEL | TU | PMSD |
|---|---|---|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | | | | | 12.79% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | MSD | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 0.3131 | 1.761 | 0.3628 | 0.3794 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision |
|---|---|---|---|---|---|
| Extreme Value | Grubbs Single Outlier | 1.956 | 2.586 | 0.6126 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(5%) |
|---|---|---|---|---|---|---|
| Between | 0.01663517 | 0.01663517 | 1 | 0.09801 | 0.7588 | Non-Significant Effect |
| Error | 2.376266 | 0.1697333 | 14 | | | |
| Total | 2.392901 | 0.1863685 | 15 | | | |

**ANOVA Assumptions**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.128 | 8.885 | 0.8777 | Equal Variances |
| Distribution | Shapiro-Wilk Normality | 0.9939 | | 1.0000 | Normal Distribution |

**Wet Biomass - Mean Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | Diff% |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.837 | 2.675 | 2.998 | 2.289 | 3.615 | 0.07877 | 0.4242 | 14.95% | 0.0% |
| 19830-003 | 8 | 2.772 | 2.62 | 2.924 | 2.005 | 3.275 | 0.07416 | 0.3994 | 14.41% | 2.27% |

**Wet Biomass - Mean Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 2.637 | 3.615 | 2.697 | 3.086 | 2.92 | 2.408 | 3.041 | 2.289 |
| 19830-003 | 2.715 | 3.275 | 2.478 | 2.831 | 3.181 | 2.89 | 2.802 | 2.005 |

Gowanus Canal Superfund Site
Nereis virens Evaluation
Device - MicroPoint1
Serial Number - M35457
Device ID - Temp
°C
Temperature
18
16
14
12
10
8
Mean: 11.5
Minimum: 10.4
Maximum: 13.5
12:00:00 PM
Jul 08, 2010
UTC-04:00
02:24:00 AM
Jul 14, 2010
UTC-04:00
04:48:00 PM
Jul 19, 2010
UTC-04:00
07:12:00 AM
Jul 25, 2010
UTC-04:00
09:36:00 PM
Jul 30, 2010
UTC-04:00
12:00:00 PM
Aug 05, 2010
UTC-04:00

# TOXICOLOGICAL EVALUATION OF SEDIMENT SAMPLES

**Gowanus Canal Superfund Site**
**Brooklyn, New York**
**Phase 3 Investigation - Bioassay Testing**
**Agreement Number 0000092848**

28 Day *Leptocheirus plumulosus*
Survival, Growth and Reproduction Toxicity Tests

Prepared For:

HDR Engineering, Inc.
One Blue Hill Plaza
Pearl River, New York 19065

Prepared By:

EnviroSystems, Inc.
P.O. Box 778
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Hampton, New Hampshire 03842-2627

October 2010
Reference 19830-10-10
Revision 1.0

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**TOXICOLOGICAL EVALUATION**
**OF SEDIMENT SAMPLES**

**Gowanus Canal Superfund Site**
**Brooklyn, New York**
**Phase 3 Investigation - Bioassay Testing**
**Agreement Number 0000092848**

28 Day *Leptocheirus plumulosus*
Survival, Growth and Reproduction Toxicity Tests

## 1.0 INTRODUCTION

This report presents the results of toxicity tests carried out on sediment samples collected from the Gowanus Canal Superfund Site in Brooklyn, New York. Samples were provided by CH2M Hill, Chantilly, Virginia. Biological testing was based on programs and protocols developed by the U.S. Environmental Protection Agency, (U.S. EPA 2001) and ASTM (2009). Potential toxicological impacts of the samples were determined by conducting 28 day toxicity tests with the estuarine amphipod, *Leptocheirus plumulosus*. All testing, toxicological and analytical, was performed at EnviroSystems, Incorporated (ESI), Hampton, New Hampshire.

Toxicity tests expose groups of organisms to environmental samples, a laboratory control and field reference sites for a specified period to assess potential impacts on a variety of endpoints, such as survival, growth or reproduction. Analysis of variance techniques are used to determine the relative toxicity of the samples as compared to the laboratory control and/or field reference sites. Endpoints for this study were survival, growth (measured as dry weight and dry biomass), and reproduction (measured as juveniles produced per surviving amphipods and juveniles produced per surviving female amphipods).

## 2.0 MATERIALS AND METHODS

### 2.1 General Methods, Biological Evaluations

Toxicological and analytical protocols used in this program follow procedures outlined in *Standard Test Method for Measuring the Toxicity of Sediment-Associated Contaminants with Estuarine and Marine Invertebrates* (ASTM 2009), *Methods for Assessing the Chronic Toxicity of Marine and Estuarine Sediment-associated Contaminants with the Amphipod, Leptocheirus plumulosus* (U.S. EPA 2001), *Methods for Assessing the Toxicity of Sediment-Associated Contaminants with Estuarine and Marine Amphipods* (U.S. EPA 1994), and *Standard Methods for the Examination of Water and Wastewater*, 20th Edition (APHA 1998). These protocols provide standard approaches for physical and chemical analyses and for the evaluation of toxicological effects of sediments on aquatic invertebrates.

### 2.2 Test Species

*Leptocheirus plumulosus* were obtained from cultures maintained by Aquatic Research Organism, Inc. (ARO) of Hampton, New Hampshire. Amphipods used in the assay were approximately $\leq$24 hours old or selected from those that pass through a 600µm sieve and are retained by a 250 µm screen at the start of the test.

### 2.3 Test Samples

Sediment samples collected from the Gowanus Canal Superfund Site were received at ESI under chain of custody. Once received, samples were inspected to determine integrity, given unique sample numbers and logged into the laboratory sample management database. Once logged in, the samples were placed in a secure refrigerated, 2 - 4 °C, storage area. A listing of sample sites, sample collection, and receipt information is summarized in Table 4.

Sediment for the laboratory control treatment was collected from the Hampton Estuary, Hampton, New Hampshire. The area is not known to receive any direct industrial inputs and has been used as a laboratory reference sediment in the testing of marine sediments for over 25 years. Overlying seawater was obtained from the Hampton Estuary. Water from the estuary has been used for the culture and maintenance of test organisms at ESI since 1978. Seawater is obtained through a filter system located on the bottom of the estuary at a point approximately 1 mile from the open ocean. The water is classified as SA-1.

### 2.4 *L. plumulosus* 28 Day Survival, Growth and Reproduction Toxicity Tests

The 28 day amphipod sediment tests were conducted according to the methods provided in ASTM (2009) and US EPA (2001). Endpoints measured at the completion of the assay were survival, growth and reproduction. Growth was measured as dry weight and dry biomass. Reproduction was measured as juvenile production per surviving amphipod and juvenile production per surviving female amphipod.

Prior to testing samples, the salinity of the pore water was measured in order to determine the appropriate salinity for the overlying water to be used during the test. Then the samples were press sieved through a 2-mm stainless steel screen to remove large stones, sticks, roots, man-made material and any indigenous organisms. Once sieved, the sediment was homogenized and placed in test chambers. Overlying water was added immediately and then the chambers were allowed to stabilize. During this period, the chambers received one volume addition daily and the pore water was measured for ammonia. Once the pore water ammonia levels were acceptable, the assay was allowed to proceed.

Test vessels were 1000 mL glass beakers containing 175 mL of sediment and approximately 725 mL of overlying water. Test vessels were drilled at a consistent height, approximately 3 cm below the lip, and the drilled hole covered with Nitex® screen to facilitate water exchange without the loss of test organisms. Vessels were maintained in a water bath during the test. Depth of the water in the bath was set below the drain hole in the test vessel to eliminate flow of water from the bath into the test vessel. The water bath was maintained in a limited access, temperature controlled room. Temperatures in the room and water bath were independently set at a temperature of 25°C. Temperature was recorded on an hourly frequency using a temperature logger placed in a surrogate vessel. The photoperiod in the test chamber was set at 16:8 hour light:dark. Lighting was supplied by cool white florescent bulbs.

A total of 20 amphipods were randomly selected from the pool of organisms and added to each treatment. Each treatment group included five replicates and a surrogate test chamber that was used to obtain water qualities during the assay without disturbing the test animals. The surrogate chamber was treated the same as actual test chambers with the addition of animals and food, but was not used to determine endpoint data. Organisms were added once the pore water ammonia levels had reached acceptable levels.

Each day during the test, chambers received approximately 1 volume addition daily of seawater having similar salinity and temperature. Water temperature was maintained at 25±2°C, and the salinity was established at 20±3 ‰. Water exchanges were facilitated by use of a distribution system designed to provide equal, regulated, flow to each chamber. The system was activated manually by the addition of water during the test. Salinity, pH, dissolved oxygen, and temperature were measured daily in a surrogate chamber for each treatment. Test chambers were aerated in order to maintain dissolved oxygen levels at ≥60% saturation. Water quality measurements were completed prior to overlying water renewals. Pore water and overlying water ammonia concentrations were measured on days 0, 7, 14, 21 and 28.

Test chambers were observed daily and any organisms found floating on the surface were noted on the data sheets. Dead amphipods were removed from the test chambers and live amphipods were countersunk. Organisms were fed three times weekly with a mixture of Tetramin® flake fish food, dried alfalfa leaves, wheat grass powder and shrimp maturation feed. Each vessel was fed 20 mg of the mixture during the first 14 days of the assay and 40 mg during the last 14 days.

After 28 days exposure, the organisms were recovered from the sediments. Each test chamber was gently swirled to loosen the sediments and the test material was dumped into stacked 8" stainless steel sieves with 750 and 350 µm mesh screens. The sediments were washed through the sieve using water and material

left on the screen was sorted to recover all adults and juveniles. This process was continued until the entire sample was evaluated. Adult organisms were differentiated from juveniles based on a visual inspection of size. Juvenile *L. plumulosus* were discarded once they were counted. Adult *L. plumulosus* were preserved with formalin solution and sexed. Adults were then placed on tared weighing pans and dried overnight at 104°C to obtain dry weight to the nearest 0.01 mg. The mean weight of surviving adult organisms was determined to assess growth.

### 2.5 Statistical Analysis

Survival, growth and reproduction data were analyzed using CETIS® software to determine significant differences between the test sediments and the associated reference sediments, as well as the laboratory control. Data sets were evaluated to determine normality of distribution and homogeneity of sample variance. Data sets were subsequently evaluated using the appropriate parametric or non-parametric Analysis of Variance (ANOVA) statistic. Statistical comparisons were made for the following endpoints: survival, dry weight, dry biomass, juvenile production per surviving amphipod and juvenile production per surviving female amphipod. Pair-wise comparisons were made using the appropriate statistical evaluation. Statistical difference was evaluated at $\alpha=0.05$.

### 2.6 Reference Toxicant Evaluation

As part of the laboratory quality control program, reference toxicant evaluations are conducted by ESI on a regular basis for each test species. These results provide relative health and response data while allowing for comparison with historic data sets. Results are summarized in Table 2.

### 2.7 Protocol Deviations

Review of data collected during this assay documented these protocol deviations.

First, there were two replicates that had 21 animals added to test vessels at the assay start.

The second protocol deviation relates to temperature monitoring during the assay. Due to a mechanical failure of the data logger assigned to the assay, the hourly temperature record was not able to be recovered. According to ESI's SOP and the method described in the ASTM (2009), temperature should be monitored hourly during the assay. Since this is described as a "should" statement and not a "must" statement, the data remains valid. Additionally all daily temperature observations during the assay were within acceptance limits.

The final protocol deviation relates to the salinity maintained during the assay. In one instance the salinity was greater than the limit specified by the protocol, which states that the daily limits are 20±3 ‰ with an overall 28 day mean of 20±2 ‰. On Day 5 the laboratory control beaker had a salinity of 23.72‰. All other recorded salinity measurements were within acceptance limits. This was most likely the result of evaporation since this beaker was closest to an air vent located in the incubator. The observed salinities are within the natural limits for this species and this deviation should not have impacted the outcome of the assay.

It is the opinion of ESI's study director that these deviations did not adversely affect the outcome of the assay.

**Table 1. Sample Collection and Receipt Summary. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

| Sample ID | Receipt Code | Sediment Designation | Sample Number | Sample Collected | | Sample Received | |
|---|---|---|---|---|---|---|---|
| | | | | Date | Time | Date | Time |
| GC-SD303-0.0-0.5 | 19830-001 | Test | 006 | 06/17/10 | 1425 | 06/19/10 | 1300 |
| GC-SD307A-0.0-0.5 | 19830-002 | Test | 007 | 06/17/10 | 1650 | 06/19/10 | 1300 |
| GC-SD326-0.0-0.5 | 19830-003 | Reference | 001 | 06/17/10 | 1338 | 06/19/10 | 1300 |
| GC-SD309-0.0-0.5 | 19830-004 | Test | 008 | 06/18/10 | 1015 | 06/19/10 | 1300 |
| GC-SD313-0.0-0.5 | 19830-005 | Test | 009 | 06/18/10 | 1030 | 06/19/10 | 1300 |
| GC-SD314-0.0-0.5 | 19830-006 | Test | 010 | 06/18/10 | 1315 | 06/19/10 | 1300 |
| GC-SD315-0.0-0.5 | 19830-007 | Test | 011 | 06/18/10 | 1240 | 06/19/10 | 1300 |
| GC-SD328-0.0-0.5 | 19830-008 | Reference | 002 | 06/18/10 | 0948 | 06/19/10 | 1300 |
| GC-SD330-0.0-0.5 | 19830-009 | Reference | 003 | 06/18/10 | 1252 | 06/19/10 | 1300 |
| GC-SD333-0.0-0.5 | 19830-010 | Reference | 004 | 06/18/10 | 1121 | 06/19/10 | 1300 |
| GC-SD307B-0.0-0.5 | 19830-011 | Test | 012 | 06/18/10 | 1555 | 06/19/10 | 1300 |
| GC-SD329-0.0-0.5 | 19830-012 | Reference | 005 | 06/18/10 | 1516 | 06/19/10 | 1300 |
| GC-SD324-0.0-0.5 | 19830-013 | Test | 013 | 06/21/10 | 1250 | 06/22/10 | 1500 |
| GC-SD321-0.0-0.5 | 19830-014 | Test | 014 | 06/21/10 | 1405 | 06/22/10 | 1500 |
| | | | | | | 06/23/10 | 0930 |
| GC-SD319-0.0-0.5 | 19830-015 | Test | 015 | 06/22/10 | 1040 | 06/23/10 | 0930 |
| GC-SD318-0.0-0.5 | 19830-016 | Test | 016 | 06/22/10 | 1435 | 06/23/10 | 0930 |
| GC-SD310-0.0-0.5 | 19830-017 | Test | 017 | 06/24/10 | 0950 | 06/25/10 | 0930 |

**Table 2. Reference Toxicant Evaluation. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

| Date | Endpoint | | Value | Historic Mean/ Central Tendency | Acceptable Range | Reference Toxicant |
|---|---|---|---|---|---|---|
| *Leptocheirus plumulosus* | | | | | | |
| 10/20/10 | Survival | LC-50 | 0.59 | 1.16 | 0.0 - 2.79 | Cadmium (mg/L) |

## 3.0 RESULTS AND DISCUSSION

### 3.1 Laboratory Control and Project Reference Site Performance

Review of the laboratory control data indicated that amphipod performance met all of the minimum acceptability criteria specified by protocol (ASTM, U.S. EPA). Mean control survival was 81.25% with an inter-replicate survival range of 70 to 100%. The coefficient of variation (CV) was computed to be 14.62%. At the end of the assay, the mean dry weight of surviving amphipods was 1.292 mg/organism. The mean dry weight of 80 randomly selected amphipods at the start of the assay was 0.098 mg/organism. The overall mean juvenile production was calculated to be 2.21 juveniles/amphipod. Minimum acceptable performance for the laboratory control is specified as 80% survival on day 28, with no individual replicate having less than 60% survival, and organisms must show some evidence of growth and reproduction.

Mean temperature collected during daily observations was 24.96°C, with a range of 23.03 to 26.77°C. Acceptable criteria are a mean temperature value of 25±1°C with maximum temporary fluctuations of 25±3°C. Protocol specified mean salinity values of 20±1‰ with temporary fluctuations of 20±3‰ and daily water quality observations demonstrated a salinity range of 18.05 to 23.72‰ with a mean value of 20.17‰.

**Table 3. Summary of Acceptable Endpoints and Measurements. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

| Endpoint / Measurement | Protocol Criteria | | Study 20201 | Protocol Met |
|---|---|---|---|---|
| Survival | lab mean ≥ 80%<br>and<br>no replicates <60% | Mean Survival %<br>Minimum Survival % | 81.25%<br>70.00% | Yes<br>Yes |
| Growth | Measured Growth | start dry wt. (mg)<br>end dry wt. (mg) | 0.098<br>1.292 | Yes<br>Yes |
| Reproduction | Juvenile Production | Overall Mean Reproduction | 2.21 | Yes |
| Temperature | Mean: 25 ±1°C<br>Minimum: 22°C<br>Maximum: 28°C | daily<br>daily<br>daily | 24.96<br>23.03<br>26.77 | Yes<br>Yes<br>Yes |
| Salinity | Mean: 20 ±1‰<br>Minimum: 17‰<br>Maximum: 23‰ | Mean Salinity<br>Minimum Salinity<br>Maximum Salinity | 20.17<br>18.05<br>23.72 | Yes<br>Yes<br>No* |

* For a discussion of the salinity deviation see Section 2.7 Protocol Deviations.

**Table 4. Summary of Project Reference Site Performance. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

| Reference Site | Sample Number | Mean Survival (%) | Mean Dry Weight (mg) | Mean Dry Biomass (mg) | Mean Juvenile Production per Surviving Amphipod | Mean Juvenile Production per Surviving Female |
|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 001 | 70.63% | 0.668 | 0.475 | 0.27 | 0.51 |
| GC-SD328-0.0-0.5 | 002 | 75.00% | 1.011 | 0.797 | 1.81 | 3.56 |
| GC-SD330-0.0-0.5 | 003 | 91.88% | 1.193 | 1.096 | 2.69 | 5.24 |
| GC-SD333-0.0-0.5 | 004 | 76.87% | 0.850 | 0.673 | 1.45 | 2.45 |
| GC-SD329-0.0-0.5 | 005 | 90.62% | 0.877 | 0.791 | 1.25 | 2.12 |

### 3.2 Summary

This program utilized protocols developed by the U.S. EPA and ASTM to assess the potential toxicological impacts that exposure to sediments from the Gowanus Canal Superfund Site would have on marine invertebrates. Table 5 provides a summary of sample sites that demonstrated a negative effect, based on the finding of statistically significant reduction in an endpoint as compared to the laboratory control or reference site. Tables 6 through 10 provide summaries of assay endpoints and detailed statistical results for each sample location. Laboratory bench sheets, detailed summaries of survival, dry weights and associated statistical support data are included in Appendix A.

**Table 5. Summary of Significant Endpoints. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

| | | Laboratory Control 19830-000 | | | | | GC-SD326 19830-003 | | | | | GC-SD328 19830-008 | | | | | GC-SD330 19830-009 | | | | | GC-SD333 19830-010 | | | | | GC-SD329 19830-012 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | survival | growth | | juveniles produced / surviving | | survival | growth | | juveniles produced / surviving | | survival | growth | | juveniles produced / surviving | | survival | growth | | juveniles produced / surviving | | survival | growth | | juveniles produced / surviving | | survival | growth | | juveniles produced / surviving | |
| Field ID | Receipt Code | | wt | bio | ♂♀ | ♀ | | wt | bio | ♂♀ | ♀ | | wt | bio | ♂♀ | ♀ | | wt | bio | ♂♀ | ♀ | | wt | bio | ♂♀ | ♀ | | wt | bio | ♂♀ | ♀ |
| GC-SD326-0.0-0.5 | 19830-003 | | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| GC-SD328-0.0-0.5 | 19830-008 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GC-SD330-0.0-0.5 | 19830-009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GC-SD333-0.0-0.5 | 19830-010 | | X | X | | X | | | | | | | | | | | X | X | X | | X | | | | | | | | | | |
| GC-SD329-0.0-0.5 | 19830-012 | | X | X | X | X | | | | | | | | | | | | X | X | X | X | | | | | | | | | | |
| GC-SD303-0.0-0.5 | 19830-001 | | X | | X | X | | | | | | | | | X | X | X | | X | X | X | | | | X | | | | | | |
| GC-SD307A-0.0-0.5 | 19830-002 | | X | X | X | X | | | | | | | X | X | X | X | X | X | X | X | X | | | | X | X | X | | X | X | X |
| GC-SD309-0.0-0.5 | 19830-004 | | X | X | X | X | | | | | | | X | | X | X | | X | X | X | X | | | | X | X | | | | | X |
| GC-SD313-0.0-0.5 | 19830-005 | X | X | X | | | X | | X | | | X | | X | | | X | X | X | | | X | | X | | | X | X | X | | |
| GC-SD314-0.0-0.5 | 19830-006 | X | X | X | NA | NA | X | X | X | NA | NA | X | X | X | NA | NA | X | X | X | NA | NA | X | X | X | NA | NA | X | X | X | NA | NA |
| GC-SD315-0.0-0.5 | 19830-007 | X | X | X | NA | NA | X | X | X | X | X | X | X | X | NA | NA | X | X | X | NA | NA | X | X | X | NA | NA | X | X | X | NA | NA |
| GC-SD307B-0.0-0.5 | 19830-011 | | X | X | X | X | | | | | | | | | | | X | X | X | X | X | | | | | | X | | | | |
| GC-SD324-0.0-0.5 | 19830-013 | | X | X | X | X | | | | | | | X | X | X | X | | X | X | X | X | | | | X | X | | | | X | X |
| GC-SD321-0.0-0.5 | 19830-014 | | X | X | X | X | | | | | | | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X |
| GC-SD319-0.0-0.5 | 19830-015 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| GC-SD318-0.0-0.5 | 19830-016 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| GC-SD310-0.0-0.5 | 19830-017 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

NA - Not Applicable for statistical analysis.

## 4.0 LITERATURE CITED


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**Table 6. *L. plumulosus* Day 28 Survival Summary. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

Day 28 Survival Summary

| Sample ID | Receipt Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19830-000 | 8 | 81.25% | 70.0% | 100.0% | 14.62% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 70.63% | 0.0% | 95.0% | 44.69% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 75.00% | 15.0% | 100.0% | 38.05% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 91.88% | 80.0% | 100.0% | 7.09% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 76.87% | 35.0% | 100.0% | 25.53% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 90.62% | 70.0% | 100.0% | 11.21% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 81.25% | 60.0% | 95.0% | 16.03% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 79.38% | 70.0% | 90.0% | 10.34% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 86.25% | 75.0% | 100.0% | 10.62% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 0.63% | 0.0% | 5.0% | 282.80% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | 0.00% | 0.0% | 0.0% | 0.00% |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | 0.00% | 0.0% | 0.0% | 0.00% |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 70.00% | 5.0% | 100.0% | 41.82% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 85.63% | 65.0% | 95.0% | 11.44% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 68.75% | 15.0% | 90.0% | 33.83% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 53.75% | 25.0% | 85.0% | 36.11% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 35.62% | 5.0% | 55.0% | 46.51% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 27.50% | 0.0% | 65.0% | 96.70% |

Day 28 Survival Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | Receipt Code | Lab Control 19830-000 reject | GC-SD326 19830-003 reject | GC-SD328 19830-008 reject | GC-SD330 19830-009 reject | GC-SD333 19830-010 reject | GC-SD329 19830-012 reject |
|---|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 19830-003 | No[a] | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | No[a] | No | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | No | No[a] | No[a] | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | No | No[a] | No | Yes | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | No | No[a] | No[a] | No | No | - |
| GC-SD303-0.0-0.5 | 19830-001 | No | No[a] | No[a] | Yes | No | No |
| GC-SD307A-0.0-0.5 | 19830-002 | No | No[a] | No[a] | Yes | No | Yes |
| GC-SD309-0.0-0.5 | 19830-004 | No | No[a] | No[a] | No | No | No |
| GC-SD313-0.0-0.5 | 19830-005 | Yes | Yes[a] | Yes[a] | Yes | Yes | Yes[a] |
| GC-SD314-0.0-0.5 | 19830-006 | Yes | Yes[a] | Yes | Yes | Yes[a] | Yes[a] |
| GC-SD315-0.0-0.5 | 19830-007 | Yes | Yes[a] | Yes[a] | Yes | Yes[a] | Yes[a] |
| GC-SD307B-0.0-0.5 | 19830-011 | No | No | No | Yes | [a]No | Yes<br>No* |
| GC-SD324-0.0-0.5 | 19830-013 | No | No[a] | No[a] | No | No | No |
| GC-SD321-0.0-0.5 | 19830-014 | No[a] | No[a] | No | Yes[a] | No | Yes[a] |
| GC-SD319-0.0-0.5 | 19830-015 | Yes | No<br>Yes* | Yes | Yes | Yes | Yes |
| GC-SD318-0.0-0.5 | 19830-016 | Yes | Yes[a] | Yes | Yes | Yes | Yes |
| GC-SD310-0.0-0.5 | 19830-017 | Yes | Yes | Yes | Yes | Yes | Yes |

Note: "*" Indicates that the analysis excluded an outlier.
"a" Indicates the presence of an outlier, however the significance of the analysis does not change when the outlier is excluded.

**Table 7. *L. plumulosus* Mean Dry Weight Summary. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

Mean Dry Weight (mg) Summary

| Sample ID | Receipt Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19830-000 | 8 | 1.292 | 0.807 | 1.603 | 19.79% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 0.668 | 0.519 | 0.894 | 20.16% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 1.011 | 0.457 | 1.446 | 30.67% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 1.193 | 0.907 | 1.403 | 16.27% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 0.850 | 0.536 | 1.169 | 26.12% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 0.877 | 0.617 | 1.186 | 20.51% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 1.072 | 0.674 | 1.357 | 20.93% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 0.725 | 0.439 | 1.128 | 28.78% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 0.746 | 0.477 | 1.196 | 31.75% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 0.440 | 0.440 | 0.440 | 0.00% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | NS | NS | NS | NS |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | NS | NS | NS | NS |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 0.861 | 0.360 | 1.139 | 27.67% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 0.768 | 0.572 | 1.014 | 20.34% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 0.583 | 0.353 | 0.840 | 26.18% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 0.316 | 0.216 | 0.460 | 26.29% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 0.297 | 0.168 | 0.450 | 36.35% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 0.414 | 0.207 | 0.701 | 44.16% |

Mean Dry Weight Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | Receipt Code | Lab Control 19830-000 reject | GC-SD326 19830-003 reject | GC-SD328 19830-008 reject | GC-SD330 19830-009 reject | GC-SD333 19830-010 reject | GC-SD329 19830-012 reject |
|---|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 19830-003 | Yes | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | Yes | No | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | No | No | No | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | Yes | No | No | Yes | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | Yes | No | No | Yes | No | - |
| GC-SD303-0.0-0.5 | 19830-001 | Yes | No | No | No | No | No |
| GC-SD307A-0.0-0.5 | 19830-002 | Yes | No | Yes | Yes | No | No |
| GC-SD309-0.0-0.5 | 19830-004 | Yes | No | Yes | Yes | No | No |
| GC-SD313-0.0-0.5 | 19830-005 | Yes | No | No | Yes | No | Yes |
| GC-SD314-0.0-0.5 | 19830-006 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD315-0.0-0.5 | 19830-007 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD307B-0.0-0.5 | 19830-011 | Yes | No[a] | No | Yes | No | No |
| GC-SD324-0.0-0.5 | 19830-013 | Yes | No | Yes | Yes | No | No |
| GC-SD321-0.0-0.5 | 19830-014 | Yes | No | Yes | Yes | Yes | Yes |
| GC-SD319-0.0-0.5 | 19830-015 | [a]Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD318-0.0-0.5 | 19830-016 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD310-0.0-0.5 | 19830-017 | Yes | Yes | Yes | Yes | Yes | Yes |

Note: "*" Indicates that the analysis excluded an outlier.
"a" Indicates the presence of an outlier, however the significance of the analysis does not change when the outlier is excluded.

**Table 8. *L. plumulosus* Day 28 Mean Dry Biomass Summary. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

Mean Dry Biomass (mg) Summary

| Sample ID | Receipt Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19830-000 | 8 | 1.058 | 0.565 | 1.362 | 26.89% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 0.475 | 0.000 | 0.742 | 50.68% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 0.797 | 0.069 | 1.157 | 45.36% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 1.096 | 0.726 | 1.332 | 17.12% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 0.673 | 0.188 | 0.932 | 38.69% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 0.791 | 0.587 | 1.126 | 21.71% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 0.886 | 0.472 | 1.171 | 30.51% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 0.576 | 0.330 | 0.790 | 28.79% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 0.643 | 0.358 | 0.957 | 32.21% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 0.003 | 0.000 | 0.022 | 282.80% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | 0.000 | 0.000 | 0.000 | 0.00% |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | 0.000 | 0.000 | 0.000 | 0.00% |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 0.645 | 0.018 | 1.018 | 44.44% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 0.666 | 0.398 | 0.963 | 28.79% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 0.418 | 0.053 | 0.630 | 43.02% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 0.175 | 0.063 | 0.303 | 48.13% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 0.105 | 0.023 | 0.202 | 62.09% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 0.130 | 0.000 | 0.386 | 121.20% |

Mean Dry Biomass Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | Receipt Code | Lab Control 19830-000 reject | GC-SD326 19830-003 reject | GC-SD328 19830-008 reject | GC-SD330 19830-009 reject | GC-SD333 19830-010 reject | GC-SD329 19830-012 reject |
|---|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 19830-003 | Yes | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | No | No | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | No | No | No[a] | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | Yes | No | No | Yes | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | Yes | No | No[a] | Yes | No | - |
| GC-SD303-0.0-0.5 | 19830-001 | No | No | No | Yes | No | No |
| GC-SD307A-0.0-0.5 | 19830-002 | Yes | No | No<br>Yes* | Yes | No | Yes |
| GC-SD309-0.0-0.5 | 19830-004 | Yes | No | No | Yes | No | No |
| GC-SD313-0.0-0.5 | 19830-005 | Yes | Yes[a] | Yes[a] | Yes[a] | Yes[a] | Yes[a] |
| GC-SD314-0.0-0.5 | 19830-006 | Yes | Yes[a] | Yes[a] | Yes[a] | Yes[a] | Yes[a] |
| GC-SD315-0.0-0.5 | 19830-007 | Yes | Yes[a] | Yes[a] | Yes[a] | Yes[a] | Yes[a] |
| GC-SD307B-0.0-0.5 | 19830-011 | Yes | No | No | Yes[a] | No | No[a] |
| GC-SD324-0.0-0.5 | 19830-013 | Yes | No | No<br>Yes* | Yes | No | No |
| GC-SD321-0.0-0.5 | 19830-014 | Yes | No | Yes[a] | Yes | Yes | Yes |
| GC-SD319-0.0-0.5 | 19830-015 | Yes | Yes[a] | Yes[a] | Yes[a] | Yes[a] | Yes |
| GC-SD318-0.0-0.5 | 19830-016 | Yes | Yes[a] | Yes | Yes[a] | Yes[a] | Yes[a] |
| GC-SD310-0.0-0.5 | 19830-017 | Yes | Yes | Yes[a] | Yes | Yes | Yes |

Note: "*" Indicates that the analysis excluded an outlier.
"a" Indicates the presence of an outlier, however the significance of the analysis does not change when the outlier is excluded.

**Table 9. *L. plumulosus* Juveniles per Surviving Amphipod Summary. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

Juveniles per Surviving Amphipod Summary

| Sample ID | Receipt Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19830-000 | 8 | 2.21 | 0.29 | 4.14 | 54.02% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 0.27 | 0.00 | 0.64 | 89.78% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 1.81 | 0.00 | 3.24 | 76.91% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 2.69 | 0.38 | 5.84 | 69.35% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 1.45 | 0.57 | 2.61 | 55.67% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 1.25 | 0.26 | 3.36 | 76.72% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 0.81 | 0.00 | 1.74 | 71.10% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 0.52 | 0.00 | 1.36 | 89.84% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 0.61 | 0.13 | 1.31 | 66.17% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | NS | NS | NS | NS |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | NS | NS | NS | NS |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 1.27 | 0.00 | 2.00 | 46.60% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 0.51 | 0.00 | 1.11 | 79.54% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 0.33 | 0.00 | 0.87 | 98.63% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |

Juveniles per Surviving Amphipod Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | Receipt Code | Lab Control 19830-000 reject | GC-SD326 19830-003 reject | GC-SD328 19830-008 reject | GC-SD330 19830-009 reject | GC-SD333 19830-010 reject | GC-SD329 19830-012 reject |
|---|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 19830-003 | Yes | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | No | No | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | No | No | No | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | No | No | No | No | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | Yes | No[a] | No | Yes | No | - |
| GC-SD303-0.0-0.5 | 19830-001 | Yes | No | Yes | Yes | Yes | No |
| GC-SD307A-0.0-0.5 | 19830-002 | Yes | No | Yes | Yes | Yes | Yes[a] |
| GC-SD309-0.0-0.5 | 19830-004 | Yes | No | Yes | Yes | Yes | No[a] |
| GC-SD313-0.0-0.5 | 19830-005 | No | No | No | No | No | No[a] |
| GC-SD314-0.0-0.5 | 19830-006 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD315-0.0-0.5 | 19830-007 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD307B-0.0-0.5 | 19830-011 | Yes | No[a] | No | Yes | No | No[a] |
| GC-SD324-0.0-0.5 | 19830-013 | Yes | No | Yes | Yes | Yes | Yes[a] |
| GC-SD321-0.0-0.5 | 19830-014 | Yes | No | Yes | Yes | Yes | Yes[a] |
| GC-SD319-0.0-0.5 | 19830-015 | Yes | Yes | Yes | Yes | Yes | Yes[a] |
| GC-SD318-0.0-0.5 | 19830-016 | Yes | Yes | Yes | Yes | Yes | Yes[a] |
| GC-SD310-0.0-0.5 | 19830-017 | Yes | Yes | Yes | Yes | Yes | Yes[a] |

Note: "*" Indicates that the analysis excluded an outlier.
"a" Indicates the presence of an outlier, however the significance of the analysis does not change when the outlier is excluded.

**Table 10.** ***L. plumulosus* Juveniles Produced per Female Summary. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

Juveniles Produced per Female Summary

| Sample ID | Receipt Code | Reps | Mean | Minimum | Maximum | CV |
|---|---|---|---|---|---|---|
| Laboratory Control | 19830-000 | 8 | 4.86 | 0.57 | 10.00 | 58.92% |
| GC-SD326-0.0-0.5 | 19830-003 | 8 | 0.51 | 0.00 | 1.50 | 103.20% |
| GC-SD328-0.0-0.5 | 19830-008 | 8 | 3.56 | 0.00 | 6.43 | 79.04% |
| GC-SD330-0.0-0.5 | 19830-009 | 8 | 5.24 | 0.75 | 11.10 | 72.89% |
| GC-SD333-0.0-0.5 | 19830-010 | 8 | 2.45 | 1.00 | 4.75 | 60.29% |
| GC-SD329-0.0-0.5 | 19830-012 | 8 | 2.12 | 0.42 | 5.22 | 70.57% |
| GC-SD303-0.0-0.5 | 19830-001 | 8 | 1.58 | 0.00 | 4.71 | 93.52% |
| GC-SD307A-0.0-0.5 | 19830-002 | 8 | 0.87 | 0.00 | 2.71 | 101.30% |
| GC-SD309-0.0-0.5 | 19830-004 | 8 | 0.96 | 0.21 | 1.91 | 61.32% |
| GC-SD313-0.0-0.5 | 19830-005 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |
| GC-SD314-0.0-0.5 | 19830-006 | 8 | NS | NS | NS | NS |
| GC-SD315-0.0-0.5 | 19830-007 | 8 | NS | NS | NS | NS |
| GC-SD307B-0.0-0.5 | 19830-011 | 8 | 2.20 | 0.00 | 3.71 | 52.52% |
| GC-SD324-0.0-0.5 | 19830-013 | 8 | 0.88 | 0.00 | 1.91 | 82.28% |
| GC-SD321-0.0-0.5 | 19830-014 | 8 | 0.47 | 0.00 | 1.44 | 108.40% |
| GC-SD319-0.0-0.5 | 19830-015 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |
| GC-SD318-0.0-0.5 | 19830-016 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |
| GC-SD310-0.0-0.5 | 19830-017 | 8 | 0.00 | 0.00 | 0.00 | 0.00% |

Juveniles Produced per Female Analysis — Statistically Significant Difference, "<" as Compared to:

| Sample ID | Receipt Code | Lab Control 19830-000 reject | GC-SD326 19830-003 reject | GC-SD328 19830-008 reject | GC-SD330 19830-009 reject | GC-SD333 19830-010 reject | GC-SD329 19830-012 reject |
|---|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 19830-003 | Yes | - | - | - | - | - |
| GC-SD328-0.0-0.5 | 19830-008 | No | No | - | - | - | - |
| GC-SD330-0.0-0.5 | 19830-009 | No | No | No | - | - | - |
| GC-SD333-0.0-0.5 | 19830-010 | Yes | No | No | Yes | - | - |
| GC-SD329-0.0-0.5 | 19830-012 | Yes | No | No | Yes | No | - |
| GC-SD303-0.0-0.5 | 19830-001 | Yes | No[a] | Yes | Yes | No | No |
| GC-SD307A-0.0-0.5 | 19830-002 | Yes | No[a] | Yes | Yes | Yes | Yes[a] |
| GC-SD309-0.0-0.5 | 19830-004 | Yes | No | Yes | Yes | Yes | Yes[a] |
| GC-SD313-0.0-0.5 | 19830-005 | No | No | No | No | No | No |
| GC-SD314-0.0-0.5 | 19830-006 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD315-0.0-0.5 | 19830-007 | Yes | Yes | Yes | Yes | Yes | Yes |
| GC-SD307B-0.0-0.5 | 19830-011 | Yes | No | No | Yes | No | No |
| GC-SD324-0.0-0.5 | 19830-013 | Yes | No | Yes | Yes | Yes | Yes[a] |
| GC-SD321-0.0-0.5 | 19830-014 | Yes[a] | No | Yes | Yes | Yes | Yes[a] |
| GC-SD319-0.0-0.5 | 19830-015 | Yes[a] | Yes[a] | Yes | Yes | Yes | Yes |
| GC-SD318-0.0-0.5 | 19830-016 | Yes[a] | Yes[a] | Yes | Yes | Yes | Yes[a] |
| GC-SD310-0.0-0.5 | 19830-017 | Yes | Yes[a] | Yes | Yes | Yes | Yes[a] |

Note: "*" Indicates that the analysis excluded an outlier.
"a" Indicates the presence of an outlier, however the significance of the analysis does not change when the outlier is excluded.

**Table 11. Summary of Water Qualities. Gowanus Canal Superfund Site, Brooklyn, New York. October 2010.**

| | | | | Overlying Water | | | Pore Water | |
|---|---|---|---|---|---|---|---|---|
| Sample ID | Receipt Code | Sample Number | Day | Salinity (‰) | Ammonia (mg/L) | Unionized Ammonia (mg/L) | Ammonia (mg/L) | Unionized Ammonia (mg/L) |
| Laboratory Control | 19830-000 | 000 | 0 | 20.08 | <0.1 | <0.002 | 9.4 | 0.0150 |
| GC-SD326-0.0-0.5 | 19830-003 | 001 | 0 | 19.25 | <0.1 | <0.002 | 0.52 | 0.0015 |
| GC-SD328-0.0-0.5 | 19830-008 | 002 | 0 | 19.07 | <0.1 | <0.003 | 0.7 | 0.0035 |
| GC-SD330-0.0-0.5 | 19830-009 | 003 | 0 | 19.03 | <0.1 | <0.003 | 8.4 | 0.0532 |
| GC-SD333-0.0-0.5 | 19830-010 | 004 | 0 | 18.05 | <0.1 | <0.004 | 0.24 | 0.0005 |
| GC-SD329-0.0-0.5 | 19830-012 | 005 | 0 | 20.29 | <0.1 | <0.004 | 0.26 | 0.0010 |
| GC-SD303-0.0-0.5 | 19830-001 | 006 | 0 | 20.04 | <0.1 | <0.003 | 2.3 | 0.0205 |
| GC-SD307A-0.0-0.5 | 19830-002 | 007 | 0 | 20.00 | <0.1 | <0.003 | 4.3 | 0.0552 |
| GC-SD309-0.0-0.5 | 19830-004 | 008 | 0 | 19.57 | <0.1 | <0.003 | <0.1 | <0.0005 |
| GC-SD313-0.0-0.5 | 19830-005 | 009 | 0 | 18.35 | <0.1 | <0.003 | <0.1 | <0.0012 |
| GC-SD314-0.0-0.5 | 19830-006 | 010 | 0 | 19.09 | <0.1 | <0.002 | 0.17 | 0.0027 |
| GC-SD315-0.0-0.5 | 19830-007 | 011 | 0 | 19.07 | <0.1 | <0.001 | <0.1 | <0.0011 |
| GC-SD307B-0.0-0.5 | 19830-011 | 012 | 0 | 19.10 | <0.1 | <0.001 | 4 | 0.0845 |
| GC-SD324-0.0-0.5 | 19830-013 | 013 | 0 | 19.23 | <0.1 | <0.002 | <0.1 | <0.0003 |
| GC-SD321-0.0-0.5 | 19830-014 | 014 | 0 | 18.95 | <0.1 | <0.002 | 1.3 | 0.0069 |
| GC-SD319-0.0-0.5 | 19830-015 | 015 | 0 | 19.05 | <0.1 | <0.003 | 0.41 | 0.0049 |
| GC-SD318-0.0-0.5 | 19830-016 | 016 | 0 | 18.34 | <0.1 | <0.003 | 0.57 | 0.0086 |
| GC-SD310-0.0-0.5 | 19830-017 | 017 | 0 | 18.70 | <0.1 | <0.003 | 0.52 | 0.0039 |
| | | | | | | | | |
| Laboratory Control | 19830-000 | 000 | 7 | 22.61 | <0.1 | <0.002 | 3.5 | 0.0074 |
| GC-SD326-0.0-0.5 | 19830-003 | 001 | 7 | 22.11 | <0.1 | <0.002 | 0.51 | 0.0028 |
| GC-SD328-0.0-0.5 | 19830-008 | 002 | 7 | 21.33 | <0.1 | <0.004 | 0.15 | 0.0018 |
| GC-SD330-0.0-0.5 | 19830-009 | 003 | 7 | 20.78 | 0.22 | 0.014 | 4.3 | 0.0334 |
| GC-SD333-0.0-0.5 | 19830-010 | 004 | 7 | 20.41 | <0.1 | <0.003 | <0.1 | <0.0001 |
| GC-SD329-0.0-0.5 | 19830-012 | 005 | 7 | 21.31 | <0.1 | <0.003 | <0.1 | <0.0003 |
| GC-SD303-0.0-0.5 | 19830-001 | 006 | 7 | 20.92 | <0.1 | <0.003 | 1.1 | 0.0075 |
| GC-SD307A-0.0-0.5 | 19830-002 | 007 | 7 | 20.58 | <0.1 | <0.003 | <0.1 | <0.0007 |
| GC-SD309-0.0-0.5 | 19830-004 | 008 | 7 | 20.8 | <0.1 | <0.003 | <0.1 | <0.0004 |
| GC-SD313-0.0-0.5 | 19830-005 | 009 | 7 | 20.27 | <0.1 | <0.004 | <0.1 | <0.0007 |
| GC-SD314-0.0-0.5 | 19830-006 | 010 | 7 | 20.42 | 0.19 | 0.007 | 0.29 | 0.0041 |
| GC-SD315-0.0-0.5 | 19830-007 | 011 | 7 | 20.3 | <0.1 | <0.001 | 0.11 | 0.0020 |
| GC-SD307B-0.0-0.5 | 19830-011 | 012 | 7 | 20.38 | <0.1 | <0.002 | 0.93 | 0.0137 |
| GC-SD324-0.0-0.5 | 19830-013 | 013 | 7 | 20.3 | <0.1 | <0.002 | 0.11 | 0.0011 |
| GC-SD321-0.0-0.5 | 19830-014 | 014 | 7 | 20.22 | <0.1 | <0.003 | 0.61 | 0.0040 |
| GC-SD319-0.0-0.5 | 19830-015 | 015 | 7 | 20.34 | <0.1 | <0.003 | 0.79 | 0.0089 |
| GC-SD318-0.0-0.5 | 19830-016 | 016 | 7 | 20.17 | <0.1 | <0.003 | 0.35 | 0.0048 |
| GC-SD310-0.0-0.5 | 19830-017 | 017 | 7 | 20.17 | <0.1 | <0.003 | <0.1 | <0.0005 |
| | | | | | | | | |
| Laboratory Control | 19830-000 | 000 | 14 | 22.96 | <0.1 | <0.002 | 2.7 | 0.0073 |
| GC-SD326-0.0-0.5 | 19830-003 | 001 | 14 | 22.29 | <0.1 | <0.003 | 0.38 | 0.0012 |
| GC-SD328-0.0-0.5 | 19830-008 | 002 | 14 | 21.85 | <0.1 | <0.003 | 0.64 | 0.0067 |
| GC-SD330-0.0-0.5 | 19830-009 | 003 | 14 | 21.49 | <0.1 | <0.003 | 4.2 | 0.0272 |
| GC-SD333-0.0-0.5 | 19830-010 | 004 | 14 | 21.11 | <0.1 | <0.003 | 0.16 | 0.0008 |
| GC-SD329-0.0-0.5 | 19830-012 | 005 | 14 | 21.35 | <0.1 | <0.003 | <0.1 | <0.0007 |
| GC-SD303-0.0-0.5 | 19830-001 | 006 | 14 | 21.09 | <0.1 | <0.003 | 0.93 | 0.0071 |
| GC-SD307A-0.0-0.5 | 19830-002 | 007 | 14 | 20.8 | <0.1 | <0.002 | 0.27 | 0.0029 |
| GC-SD309-0.0-0.5 | 19830-004 | 008 | 14 | 20.58 | <0.1 | <0.003 | <0.1 | <0.0003 |

| Sample ID | Receipt Code | Sample Number | Day | Overlying Water | | | Pore Water | |
|---|---|---|---|---|---|---|---|---|
| | | | | Salinity (‰) | Ammonia (mg/L) | Unionized Ammonia (mg/L) | Ammonia (mg/L) | Unionized Ammonia (mg/L) |
| GC-SD313-0.0-0.5 | 19830-005 | 009 | 14 | 20.46 | <0.1 | <0.003 | <0.1 | <0.0006 |
| GC-SD314-0.0-0.5 | 19830-006 | 010 | 14 | 20.65 | <0.1 | <0.002 | <0.1 | <0.0006 |
| GC-SD315-0.0-0.5 | 19830-007 | 011 | 14 | 20.45 | <0.1 | <0.002 | <0.1 | <0.0007 |
| GC-SD307B-0.0-0.5 | 19830-011 | 012 | 14 | 20.45 | <0.1 | <0.002 | <0.1 | <0.0008 |
| GC-SD324-0.0-0.5 | 19830-013 | 013 | 14 | 20.45 | <0.1 | <0.003 | <0.1 | <0.0008 |
| GC-SD321-0.0-0.5 | 19830-014 | 014 | 14 | 20.38 | <0.1 | <0.003 | 0.48 | 0.0036 |
| GC-SD319-0.0-0.5 | 19830-015 | 015 | 14 | 20.38 | <0.1 | <0.003 | 0.77 | 0.0113 |
| GC-SD318-0.0-0.5 | 19830-016 | 016 | 14 | 20.11 | <0.1 | <0.004 | 0.38 | 0.0047 |
| GC-SD310-0.0-0.5 | 19830-017 | 017 | 14 | 20.16 | <0.1 | <0.003 | 0.42 | 0.0031 |
| Laboratory Control | 19830-000 | 000 | 21 | 22.36 | <0.1 | <0.002 | 2.3 | 0.0076 |
| GC-SD326-0.0-0.5 | 19830-003 | 001 | 21 | 22.08 | <0.1 | <0.002 | 0.34 | 0.0011 |
| GC-SD328-0.0-0.5 | 19830-008 | 002 | 21 | 21.52 | <0.1 | <0.003 | <0.1 | <0.0005 |
| GC-SD330-0.0-0.5 | 19830-009 | 003 | 21 | 21.40 | <0.1 | <0.002 | 4.3 | 0.0311 |
| GC-SD333-0.0-0.5 | 19830-010 | 004 | 21 | 20.56 | <0.1 | <0.002 | <0.1 | <0.0003 |
| GC-SD329-0.0-0.5 | 19830-012 | 005 | 21 | 21.55 | <0.1 | <0.001 | <0.1 | <0.0009 |
| GC-SD303-0.0-0.5 | 19830-001 | 006 | 21 | 20.88 | <0.1 | <0.003 | 0.58 | 0.0046 |
| GC-SD307A-0.0-0.5 | 19830-002 | 007 | 21 | 20.65 | <0.1 | <0.002 | <0.1 | <0.0005 |
| GC-SD309-0.0-0.5 | 19830-004 | 008 | 21 | 20.31 | <0.1 | <0.002 | 0.67 | 0.0021 |
| GC-SD313-0.0-0.5 | 19830-005 | 009 | 21 | 19.99 | <0.1 | <0.002 | <0.1 | <0.0005 |
| GC-SD314-0.0-0.5 | 19830-006 | 010 | 21 | 19.95 | <0.1 | <0.002 | <0.1 | <0.0007 |
| GC-SD315-0.0-0.5 | 19830-007 | 011 | 21 | 19.88 | <0.1 | <0.002 | <0.1 | <0.0008 |
| GC-SD307B-0.0-0.5 | 19830-011 | 012 | 21 | 19.87 | <0.1 | <0.002 | 0.46 | 0.0050 |
| GC-SD324-0.0-0.5 | 19830-013 | 013 | 21 | 19.93 | <0.1 | <0.002 | <0.1 | <0.0005 |
| GC-SD321-0.0-0.5 | 19830-014 | 014 | 21 | 19.72 | <0.1 | <0.002 | 0.54 | 0.0036 |
| GC-SD319-0.0-0.5 | 19830-015 | 015 | 21 | 20.08 | <0.1 | <0.002 | 0.73 | 0.0065 |
| GC-SD318-0.0-0.5 | 19830-016 | 016 | 21 | 20.08 | <0.1 | <0.002 | 0.14 | 0.0008 |
| GC-SD310-0.0-0.5 | 19830-017 | 017 | 21 | 20.13 | <0.1 | <0.002 | 0.47 | 0.0033 |
| Laboratory Control | 19830-000 | 000 | 28 | 21.98 | <0.1 | <0.001 | 3.5 | 0.0127 |
| GC-SD326-0.0-0.5 | 19830-003 | 001 | 28 | 21.72 | <0.1 | <0.002 | 0.23 | 0.0012 |
| GC-SD328-0.0-0.5 | 19830-008 | 002 | 28 | 21.52 | <0.1 | <0.002 | 0.1 | 0.0007 |
| GC-SD330-0.0-0.5 | 19830-009 | 003 | 28 | 21.39 | <0.1 | <0.002 | 4.4 | 0.0247 |
| GC-SD333-0.0-0.5 | 19830-010 | 004 | 28 | 20.47 | <0.1 | <0.002 | 0.2 | 0.0015 |
| GC-SD329-0.0-0.5 | 19830-012 | 005 | 28 | 20.67 | <0.1 | <0.002 | 0.8 | 0.0062 |
| GC-SD303-0.0-0.5 | 19830-001 | 006 | 28 | 20.12 | <0.1 | <0.002 | 0.79 | 0.0053 |
| GC-SD307A-0.0-0.5 | 19830-002 | 007 | 28 | 19.96 | <0.1 | <0.002 | <0.1 | <0.0004 |
| GC-SD309-0.0-0.5 | 19830-004 | 008 | 28 | 19.84 | <0.1 | <0.002 | 0.8 | 0.0032 |
| GC-SD313-0.0-0.5 | 19830-005 | 009 | 28 | 19.31 | <0.1 | <0.002 | <0.1 | <0.0005 |
| GC-SD314-0.0-0.5 | 19830-006 | 010 | 28 | 19.13 | <0.1 | <0.002 | <0.1 | <0.0006 |
| GC-SD315-0.0-0.5 | 19830-007 | 011 | 28 | 18.96 | <0.1 | <0.001 | <0.1 | <0.0006 |
| GC-SD307B-0.0-0.5 | 19830-011 | 012 | 28 | 18.87 | <0.1 | <0.001 | 0.45 | 0.0033 |
| GC-SD324-0.0-0.5 | 19830-013 | 013 | 28 | 19.05 | <0.1 | <0.002 | 0.18 | 0.0011 |
| GC-SD321-0.0-0.5 | 19830-014 | 014 | 28 | 18.81 | <0.1 | <0.002 | 0.47 | 0.0032 |
| GC-SD319-0.0-0.5 | 19830-015 | 015 | 28 | 19.49 | <0.1 | <0.002 | 0.69 | 0.0052 |
| GC-SD318-0.0-0.5 | 19830-016 | 016 | 28 | 19.45 | <0.1 | <0.002 | 0.36 | 0.0024 |
| GC-SD310-0.0-0.5 | 19830-017 | 017 | 28 | 19.52 | <0.1 | <0.002 | 0.27 | 0.0014 |

Additional water quality and analytical support data provided in Appendix A.

## APPENDIX A
## RAW DATA AND STATISTICAL SUPPORT


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# *Leptocheirus plumulosus* 28 Day Sediment Evaluation

| Study: 20201 | Client: HDR Engineering, Inc. | Project: Gowanus Canal Superfund Site |
|---|---|---|

| Day | Date | Renew | Fed | | Initial | Notes |
|---|---|---|---|---|---|---|
| 0 | 10/14/10 | ✓ | 1mL | ✓ | AM/JTP | |
| 1 | 10/15/10 | ✓ | 1mL | ✓ | JTP/JEB | |
| 2 | 10/16/10 | ✓ | 1mL | – | AM | |
| 3 | 10/17/10 | ✓ | 1mL | – | JTP | |
| 4 | 10/18/10 | ✓ | 1mL | ✓ | JTP | |
| 5 | 10/19/10 | ✓ | 1mL | – | JTP/AM | |
| 6 | 10/20/10 | ✓ | 1mL | ✓ | JTP/AM | |
| 7 | 10/21/10 | ✓ | 1mL | – | JTP | |
| 8 | 10/22/10 | ✓ | 1mL | ✓ | JTP/AM | |
| 9 | 10/23/10 | ✓ | 1mL | – | " | |
| 10 | 10·24·10 | ✓ | 1mL | – | DM/JL | |
| 11 | 10/25/10 | ✓ | 1mL | ✓ | AM | |
| 12 | 10/26/10 | ✓ | 1mL | – | AM | |
| 13 | 10/27/10 | ✓ | 1mL | ✓ | AM/JTP | |
| 14 | 10/28/10 | ✓ | 1mL | – | JTP/AM | |
| 15 | 10/29/10 | ✓ | 2mL | ✓ | AM | |
| 16 | 10/30/10 | ✓ | 2mL | – | " | |
| 17 | 10·31·10 | ✓ | 2mL | – | DM | |
| 18 | 11/1/10 | ✓ | 2mL | ✓ | JTP/AM | |
| 19 | 11/2/10 | ✓ | 2mL | – | JTP | |
| 20 | 11/3/10 | ✓ | 2mL | ✓ | JTP | |
| 21 | 11/4/10 | ✓ | 2mL | – | JTP/AM | |
| 22 | 11/5/10 | ✓ | 2mL | ✓ | JTP/AM | |
| 23 | 11/6/10 | ✓ | 2mL | – | JTP | |
| 24 | 11/7/10 | ✓ | 2mL | – | AM | |
| 25 | 11/8/10 | ✓ | 2mL | ✓ | JTP | |
| 26 | 11/9/10 | ✓ | 2mL | – | JTP/AM | |
| 27 | 11/10/10 | ✓ | 2mL | ✓ | AM/JTP | |
| 28 | 11/11/10 | – | 2mL | – | AM/JTP | |

| Pore Water collected for pH and Ammonia | | |
|---|---|---|
| | Day 0 | Initial: AM/JTP |
| | Day 7 | Initial: JTP |
| | Day 14 | Initial: JTP/AM |
| | Day 21 | Initial: JTP/AM |
| | Day 28 | Initial: AM |

| Feed on Monday/Wednesday/Friday | Overlying Salinity: 20ppt | Temperature: 25°C |
|---|---|---|

YSI 556 MPS Sample Reading Order

Study Number: 20201

Client: HDR Engineering, Inc.

Project: Gowanus Canal Superfund Site

| Reading Number | Field ID | Receipt Number | Sample Number |
|---|---|---|---|
| 0 | Laboratory Control | 20050-000 | 000 |
| 1 | GC-SD326-0.0-0.5 | 19830-003 | 001 |
| 2 | GC-SD328-0.0-0.5 | 19830-008 | 002 |
| 3 | GC-SD330-0.0-0.5 | 19830-009 | 003 |
| 4 | GC-SD333-0.0-0.5 | 19830-010 | 004 |
| 5 | GC-SD329-0.0-0.5 | 19830-012 | 005 |
| 6 | GC-SD303-0.0-0.5 | 19830-001 | 006 |
| 7 | GC-SD307A-0.0-0.5 | 19830-002 | 007 |
| 8 | GC-SD309-0.0-0.5 | 19830-004 | 008 |
| 9 | GC-SD313-0.0-0.5 | 19830-005 | 009 |
| 10 | GC-SD314-0.0-0.5 | 19830-006 | 010 |
| 11 | GC-SD315-0.0-0.5 | 19830-007 | 011 |
| 12 | GC-SD307B-0.0-0.5 | 19830-011 | 012 |
| 13 | GC-SD324-0.0-0.5 | 19830-013 | 013 |
| 14 | GC-SD321-0.0-0.5 | 19830-014 | 014 |
| 15 | GC-SD319-0.0-0.5 | 19830-015 | 015 |
| 16 | GC-SD318-0.0-0.5 | 19830-016 | 016 |
| 17 | GC-SD310-0.0-0.5 | 19830-017 | 017 |

**STUDY: 20201**
**CLIENT: HDR Engineering, Inc.**
**PROJECT: Gowanus Canal**
**ASSAY: Leptocheirus plumulosus 28 Day Assay**
**TASK: Daily Overlying Water Qualities**

| | Temp | DO Conc | pH | SpCond | Salinity |
|---|---|---|---|---|---|
| Minimum: | 23.03 | 6.00 | 7.64 | 29214 | 18.05 |
| Mean: | 24.96 | 6.89 | | 32326 | 20.17 |
| Maximum: | 26.77 | 7.50 | 8.26 | 37430 | 23.72 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| Laboratory Control | 000 | 00 | 10/14/10 11:28:16 | 24.29 | 7.24 | 7.78 | 32193 | 20.08 |
| GC-SD326-0.0-0.5 | 001 | 00 | 10/14/10 11:28:59 | 24.31 | 7.20 | 7.96 | 30973 | 19.25 |
| GC-SD328-0.0-0.5 | 002 | 00 | 10/14/10 11:29:12 | 24.19 | 7.36 | 8.05 | 30704 | 19.07 |
| GC-SD330-0.0-0.5 | 003 | 00 | 10/14/10 11:31:39 | 23.91 | 7.15 | 8.04 | 30646 | 19.03 |
| GC-SD333-0.0-0.5 | 004 | 00 | 10/14/10 11:31:56 | 24.24 | 7.21 | 8.21 | 29214 | 18.05 |
| GC-SD329-0.0-0.5 | 005 | 00 | 10/14/10 11:32:06 | 24.31 | 7.17 | 8.17 | 32487 | 20.29 |
| GC-SD303-0.0-0.5 | 006 | 00 | 10/14/10 11:32:19 | 24.29 | 7.28 | 8.05 | 32128 | 20.04 |
| GC-SD307A-0.0-0.5 | 007 | 00 | 10/14/10 11:32:30 | 24.33 | 7.29 | 8.06 | 32065 | 20.00 |
| GC-SD309-0.0-0.5 | 008 | 00 | 10/14/10 11:32:47 | 24.40 | 7.32 | 8.08 | 31447 | 19.57 |
| GC-SD313-0.0-0.5 | 009 | 00 | 10/14/10 11:32:57 | 24.32 | 7.41 | 8.01 | 29651 | 18.35 |
| GC-SD314-0.0-0.5 | 010 | 00 | 10/14/10 11:33:10 | 24.14 | 7.35 | 7.82 | 30736 | 19.09 |
| GC-SD315-0.0-0.5 | 011 | 00 | 10/14/10 11:33:25 | 24.21 | 7.13 | 7.73 | 30718 | 19.07 |
| GC-SD307B-0.0-0.5 | 012 | 00 | 10/14/10 11:33:34 | 24.22 | 7.09 | 7.76 | 30757 | 19.10 |
| GC-SD324-0.0-0.5 | 013 | 00 | 10/14/10 11:33:43 | 24.22 | 7.08 | 7.84 | 30949 | 19.23 |
| GC-SD321-0.0-0.5 | 014 | 00 | 10/14/10 11:33:54 | 24.26 | 7.18 | 7.96 | 30538 | 18.95 |
| GC-SD319-0.0-0.5 | 015 | 00 | 10/14/10 11:34:06 | 24.32 | 7.15 | 8.09 | 30684 | 19.05 |
| GC-SD318-0.0-0.5 | 016 | 00 | 10/14/10 11:34:22 | 24.33 | 7.12 | 8.08 | 29649 | 18.34 |
| GC-SD310-0.0-0.5 | 017 | 00 | 10/14/10 11:34:32 | 24.32 | 7.05 | 8.06 | 30168 | 18.70 |
| Laboratory Control | 000 | 01 | 10/15/10 09:10:33 | 26.53 | 6.55 | 7.64 | 33773 | 21.13 |
| GC-SD326-0.0-0.5 | 001 | 01 | 10/15/10 09:11:12 | 26.56 | 6.59 | 7.90 | 32935 | 20.55 |
| GC-SD328-0.0-0.5 | 002 | 01 | 10/15/10 09:11:24 | 26.62 | 6.68 | 7.98 | 32789 | 20.45 |
| GC-SD330-0.0-0.5 | 003 | 01 | 10/15/10 09:11:38 | 26.58 | 6.66 | 7.92 | 31939 | 19.87 |
| GC-SD333-0.0-0.5 | 004 | 01 | 10/15/10 09:11:59 | 26.63 | 6.66 | 8.06 | 30812 | 19.10 |
| GC-SD329-0.0-0.5 | 005 | 01 | 10/15/10 09:12:17 | 26.65 | 6.69 | 7.99 | 32433 | 20.21 |
| GC-SD303-0.0-0.5 | 006 | 01 | 10/15/10 09:12:31 | 26.65 | 6.76 | 7.90 | 31791 | 19.77 |
| GC-SD307A-0.0-0.5 | 007 | 01 | 10/15/10 09:12:43 | 26.71 | 6.71 | 7.88 | 31809 | 19.78 |
| GC-SD309-0.0-0.5 | 008 | 01 | 10/15/10 09:12:58 | 26.77 | 6.72 | 7.96 | 31357 | 19.47 |
| GC-SD313-0.0-0.5 | 009 | 01 | 10/15/10 09:13:13 | 26.76 | 6.79 | 7.94 | 30245 | 18.71 |
| GC-SD314-0.0-0.5 | 010 | 01 | 10/15/10 09:13:26 | 26.70 | 6.64 | 7.82 | 30942 | 19.18 |
| GC-SD315-0.0-0.5 | 011 | 01 | 10/15/10 09:13:36 | 26.67 | 6.56 | 7.74 | 30690 | 19.01 |
| GC-SD307B-0.0-0.5 | 012 | 01 | 10/15/10 09:13:57 | 26.63 | 6.55 | 7.71 | 30894 | 19.15 |
| GC-SD324-0.0-0.5 | 013 | 01 | 10/15/10 09:14:09 | 26.64 | 6.56 | 7.75 | 30901 | 19.16 |
| GC-SD321-0.0-0.5 | 014 | 01 | 10/15/10 09:14:25 | 26.69 | 6.68 | 7.91 | 30690 | 19.01 |
| GC-SD319-0.0-0.5 | 015 | 01 | 10/15/10 09:14:38 | 26.71 | 6.66 | 7.98 | 30980 | 19.21 |
| GC-SD318-0.0-0.5 | 016 | 01 | 10/15/10 09:14:52 | 26.66 | 6.48 | 7.93 | 30507 | 18.89 |
| GC-SD310-0.0-0.5 | 017 | 01 | 10/15/10 09:15:09 | 26.72 | 6.48 | 7.95 | 30727 | 19.04 |
| Laboratory Control | 000 | 02 | 10/16/10 09:54:19 | 25.26 | 6.67 | 7.71 | 34601 | 21.73 |
| GC-SD326-0.0-0.5 | 001 | 02 | 10/16/10 09:54:48 | 25.25 | 6.46 | 7.84 | 34873 | 21.92 |
| GC-SD328-0.0-0.5 | 002 | 02 | 10/16/10 09:55:03 | 25.31 | 6.71 | 8.00 | 34105 | 21.39 |
| GC-SD330-0.0-0.5 | 003 | 02 | 10/16/10 09:55:15 | 25.24 | 6.73 | 8.02 | 33281 | 20.82 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD333-0.0-0.5 | 004 | 02 | 10/16/10 09:55:27 | 25.26 | 6.68 | 8.06 | 32297 | 20.14 |
| GC-SD329-0.0-0.5 | 005 | 02 | 10/16/10 09:55:40 | 25.32 | 6.74 | 8.02 | 33286 | 20.82 |
| GC-SD303-0.0-0.5 | 006 | 02 | 10/16/10 09:55:50 | 25.35 | 6.81 | 7.93 | 32596 | 20.34 |
| GC-SD307A-0.0-0.5 | 007 | 02 | 10/16/10 09:56:07 | 25.41 | 6.80 | 7.95 | 32358 | 20.18 |
| GC-SD309-0.0-0.5 | 008 | 02 | 10/16/10 09:56:22 | 25.46 | 6.83 | 8.02 | 32017 | 19.94 |
| GC-SD313-0.0-0.5 | 009 | 02 | 10/16/10 09:56:34 | 25.46 | 6.91 | 8.03 | 31173 | 19.36 |
| GC-SD314-0.0-0.5 | 010 | 02 | 10/16/10 09:56:51 | 25.37 | 6.78 | 7.83 | 31454 | 19.56 |
| GC-SD315-0.0-0.5 | 011 | 02 | 10/16/10 09:57:08 | 25.37 | 6.71 | 7.71 | 31245 | 19.42 |
| GC-SD307B-0.0-0.5 | 012 | 02 | 10/16/10 09:57:22 | 25.34 | 6.77 | 7.69 | 31356 | 19.49 |
| GC-SD324-0.0-0.5 | 013 | 02 | 10/16/10 09:57:39 | 25.27 | 6.83 | 7.75 | 31440 | 19.55 |
| GC-SD321-0.0-0.5 | 014 | 02 | 10/16/10 09:57:53 | 25.36 | 6.81 | 7.88 | 31147 | 19.35 |
| GC-SD319-0.0-0.5 | 015 | 02 | 10/16/10 09:58:06 | 25.38 | 6.79 | 7.97 | 31414 | 19.53 |
| GC-SD318-0.0-0.5 | 016 | 02 | 10/16/10 09:58:17 | 25.34 | 6.65 | 7.96 | 31051 | 19.28 |
| GC-SD310-0.0-0.5 | 017 | 02 | 10/16/10 09:58:29 | 25.37 | 6.56 | 7.95 | 31318 | 19.47 |
| | | | | | | | | |
| Laboratory Control | 000 | 03 | 10/17/10 09:20:06 | 25.26 | 6.45 | 7.73 | 36216 | 22.86 |
| GC-SD326-0.0-0.5 | 001 | 03 | 10/17/10 09:20:36 | 25.32 | 6.38 | 7.97 | 35740 | 22.52 |
| GC-SD328-0.0-0.5 | 002 | 03 | 10/17/10 09:20:52 | 25.41 | 6.57 | 8.14 | 34614 | 21.74 |
| GC-SD330-0.0-0.5 | 003 | 03 | 10/17/10 09:21:10 | 25.34 | 6.49 | 8.11 | 33890 | 21.24 |
| GC-SD333-0.0-0.5 | 004 | 03 | 10/17/10 09:21:28 | 25.37 | 6.51 | 8.21 | 33106 | 20.69 |
| GC-SD329-0.0-0.5 | 005 | 03 | 10/17/10 09:21:46 | 25.44 | 6.66 | 8.13 | 33218 | 20.77 |
| GC-SD303-0.0-0.5 | 006 | 03 | 10/17/10 09:22:04 | 25.43 | 6.73 | 7.99 | 32572 | 20.33 |
| GC-SD307A-0.0-0.5 | 007 | 03 | 10/17/10 09:22:19 | 25.48 | 6.73 | 8.03 | 32268 | 20.12 |
| GC-SD309-0.0-0.5 | 008 | 03 | 10/17/10 09:22:36 | 25.54 | 6.74 | 8.14 | 32021 | 19.95 |
| GC-SD313-0.0-0.5 | 009 | 03 | 10/17/10 09:22:49 | 25.51 | 6.78 | 8.12 | 31297 | 19.45 |
| GC-SD314-0.0-0.5 | 010 | 03 | 10/17/10 09:23:05 | 25.44 | 6.67 | 7.92 | 31126 | 19.33 |
| GC-SD315-0.0-0.5 | 011 | 03 | 10/17/10 09:23:25 | 25.46 | 6.57 | 7.80 | 30957 | 19.22 |
| GC-SD307B-0.0-0.5 | 012 | 03 | 10/17/10 09:23:45 | 25.42 | 6.58 | 7.81 | 30980 | 19.23 |
| GC-SD324-0.0-0.5 | 013 | 03 | 10/17/10 09:24:05 | 25.46 | 6.63 | 7.91 | 31048 | 19.28 |
| GC-SD321-0.0-0.5 | 014 | 03 | 10/17/10 09:24:21 | 25.49 | 6.69 | 8.06 | 30713 | 19.05 |
| GC-SD319-0.0-0.5 | 015 | 03 | 10/17/10 09:24:36 | 25.52 | 6.66 | 8.14 | 31571 | 19.64 |
| GC-SD318-0.0-0.5 | 016 | 03 | 10/17/10 09:24:51 | 25.51 | 6.48 | 8.03 | 31255 | 19.42 |
| GC-SD310-0.0-0.5 | 017 | 03 | 10/17/10 09:25:04 | 25.54 | 6.32 | 8.05 | 31470 | 19.57 |
| | | | | | | | | |
| Laboratory Control | 000 | 04 | 10/18/10 08:35:33 | 24.95 | 6.89 | 7.93 | 34270 | 21.51 |
| GC-SD326-0.0-0.5 | 001 | 04 | 10/18/10 08:36:07 | 25.21 | 6.69 | 8.06 | 33129 | 20.71 |
| GC-SD328-0.0-0.5 | 002 | 04 | 10/18/10 08:36:23 | 25.31 | 6.83 | 8.18 | 32764 | 20.46 |
| GC-SD330-0.0-0.5 | 003 | 04 | 10/18/10 08:36:36 | 25.29 | 6.81 | 8.12 | 31978 | 19.92 |
| GC-SD333-0.0-0.5 | 004 | 04 | 10/18/10 08:36:48 | 25.31 | 6.74 | 8.15 | 31364 | 19.50 |
| GC-SD329-0.0-0.5 | 005 | 04 | 10/18/10 08:37:01 | 25.34 | 6.84 | 8.15 | 31699 | 19.73 |
| GC-SD303-0.0-0.5 | 006 | 04 | 10/18/10 08:37:12 | 25.30 | 7.01 | 8.09 | 31166 | 19.36 |
| GC-SD307A-0.0-0.5 | 007 | 04 | 10/18/10 08:37:21 | 25.29 | 7.07 | 8.07 | 31017 | 19.26 |
| GC-SD309-0.0-0.5 | 008 | 04 | 10/18/10 08:37:34 | 25.29 | 7.08 | 8.16 | 30894 | 19.18 |
| GC-SD313-0.0-0.5 | 009 | 04 | 10/18/10 08:37:45 | 25.26 | 7.13 | 8.20 | 30423 | 18.86 |
| GC-SD314-0.0-0.5 | 010 | 04 | 10/18/10 08:37:55 | 25.19 | 7.07 | 8.09 | 30368 | 18.82 |
| GC-SD315-0.0-0.5 | 011 | 04 | 10/18/10 08:38:06 | 25.19 | 6.98 | 7.93 | 30176 | 18.69 |
| GC-SD307B-0.0-0.5 | 012 | 04 | 10/18/10 08:38:17 | 25.14 | 6.95 | 7.87 | 30251 | 18.74 |
| GC-SD324-0.0-0.5 | 013 | 04 | 10/18/10 08:38:28 | 25.16 | 6.92 | 7.90 | 30296 | 18.77 |
| GC-SD321-0.0-0.5 | 014 | 04 | 10/18/10 08:38:38 | 25.18 | 6.91 | 8.05 | 30010 | 18.58 |
| GC-SD319-0.0-0.5 | 015 | 04 | 10/18/10 08:38:49 | 25.21 | 6.94 | 8.17 | 30676 | 19.03 |
| GC-SD318-0.0-0.5 | 016 | 04 | 10/18/10 08:39:02 | 25.22 | 6.85 | 8.09 | 30345 | 18.80 |
| GC-SD310-0.0-0.5 | 017 | 04 | 10/18/10 08:39:23 | 25.25 | 6.78 | 8.14 | 30535 | 18.93 |
| | | | | | | | | |
| Laboratory Control | 000 | 05 | 10/19/10 08:24:08 | 24.47 | 6.49 | 7.77 | 37430 | 23.72 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD326-0.0-0.5 | 001 | 05 | 10/19/10 08:24:32 | 24.42 | 6.44 | 7.98 | 35669 | 22.49 |
| GC-SD328-0.0-0.5 | 002 | 05 | 10/19/10 08:24:51 | 24.54 | 6.58 | 8.18 | 34685 | 21.80 |
| GC-SD330-0.0-0.5 | 003 | 05 | 10/19/10 08:25:13 | 24.49 | 6.51 | 8.07 | 33896 | 21.26 |
| GC-SD333-0.0-0.5 | 004 | 05 | 10/19/10 08:25:35 | 24.54 | 6.55 | 8.18 | 33322 | 20.86 |
| GC-SD329-0.0-0.5 | 005 | 05 | 10/19/10 08:25:56 | 24.61 | 6.70 | 8.14 | 33383 | 20.90 |
| GC-SD303-0.0-0.5 | 006 | 05 | 10/19/10 08:26:15 | 24.62 | 6.70 | 8.00 | 32845 | 20.53 |
| GC-SD307A-0.0-0.5 | 007 | 05 | 10/19/10 08:26:40 | 24.69 | 6.66 | 8.03 | 32522 | 20.30 |
| GC-SD309-0.0-0.5 | 008 | 05 | 10/19/10 08:27:03 | 24.75 | 6.71 | 8.16 | 32412 | 20.23 |
| GC-SD313-0.0-0.5 | 009 | 05 | 10/19/10 08:27:27 | 24.74 | 6.66 | 8.23 | 31981 | 19.93 |
| GC-SD314-0.0-0.5 | 010 | 05 | 10/19/10 08:27:43 | 24.67 | 6.70 | 7.99 | 31775 | 19.79 |
| GC-SD315-0.0-0.5 | 011 | 05 | 10/19/10 08:28:01 | 24.70 | 6.57 | 7.82 | 31628 | 19.69 |
| GC-SD307B-0.0-0.5 | 012 | 05 | 10/19/10 08:28:24 | 24.63 | 6.54 | 7.82 | 31724 | 19.76 |
| GC-SD324-0.0-0.5 | 013 | 05 | 10/19/10 08:28:46 | 24.70 | 6.55 | 7.92 | 31603 | 19.67 |
| GC-SD321-0.0-0.5 | 014 | 05 | 10/19/10 08:29:04 | 24.73 | 6.60 | 8.08 | 31451 | 19.57 |
| GC-SD319-0.0-0.5 | 015 | 05 | 10/19/10 08:29:28 | 24.74 | 6.60 | 8.10 | 31911 | 19.88 |
| GC-SD318-0.0-0.5 | 016 | 05 | 10/19/10 08:29:57 | 24.73 | 6.03 | 7.86 | 31671 | 19.72 |
| GC-SD310-0.0-0.5 | 017 | 05 | 10/19/10 08:30:32 | 24.80 | 6.45 | 8.13 | 31851 | 19.84 |
| | | | | | | | | |
| Laboratory Control | 000 | 06 | 10/20/10 08:01:03 | 24.82 | 6.62 | 7.76 | 34239 | 21.49 |
| GC-SD326-0.0-0.5 | 001 | 06 | 10/20/10 08:01:44 | 24.76 | 6.74 | 8.06 | 33085 | 20.69 |
| GC-SD328-0.0-0.5 | 002 | 06 | 10/20/10 08:02:16 | 24.85 | 6.79 | 8.21 | 32481 | 20.27 |
| GC-SD330-0.0-0.5 | 003 | 06 | 10/20/10 08:02:34 | 24.75 | 6.77 | 8.06 | 31558 | 19.64 |
| GC-SD333-0.0-0.5 | 004 | 06 | 10/20/10 08:02:58 | 24.79 | 6.85 | 8.11 | 30986 | 19.25 |
| GC-SD329-0.0-0.5 | 005 | 06 | 10/20/10 08:03:16 | 24.86 | 6.84 | 8.09 | 33463 | 20.95 |
| GC-SD303-0.0-0.5 | 006 | 06 | 10/20/10 08:03:37 | 24.88 | 6.89 | 7.97 | 32895 | 20.56 |
| GC-SD307A-0.0-0.5 | 007 | 06 | 10/20/10 08:04:14 | 24.92 | 6.85 | 8.02 | 32474 | 20.27 |
| GC-SD309-0.0-0.5 | 008 | 06 | 10/20/10 08:04:46 | 24.98 | 6.84 | 8.16 | 32422 | 20.23 |
| GC-SD313-0.0-0.5 | 009 | 06 | 10/20/10 08:05:11 | 24.95 | 6.81 | 8.24 | 31994 | 19.94 |
| GC-SD314-0.0-0.5 | 010 | 06 | 10/20/10 08:05:38 | 24.86 | 6.71 | 7.87 | 31967 | 19.92 |
| GC-SD315-0.0-0.5 | 011 | 06 | 10/20/10 08:06:02 | 24.88 | 6.62 | 7.77 | 31811 | 19.81 |
| GC-SD307B-0.0-0.5 | 012 | 06 | 10/20/10 08:06:29 | 24.82 | 6.70 | 7.81 | 31925 | 19.89 |
| GC-SD324-0.0-0.5 | 013 | 06 | 10/20/10 08:06:54 | 24.88 | 6.72 | 7.94 | 31776 | 19.79 |
| GC-SD321-0.0-0.5 | 014 | 06 | 10/20/10 08:07:52 | 24.94 | 6.76 | 8.11 | 31652 | 19.70 |
| GC-SD319-0.0-0.5 | 015 | 06 | 10/20/10 08:08:07 | 24.95 | 6.81 | 8.10 | 31768 | 19.78 |
| GC-SD318-0.0-0.5 | 016 | 06 | 10/20/10 08:08:46 | 24.89 | 6.00 | 7.84 | 31502 | 19.60 |
| GC-SD310-0.0-0.5 | 017 | 06 | 10/20/10 08:09:27 | 24.99 | 6.65 | 8.13 | 31628 | 19.68 |
| | | | | | | | | |
| Laboratory Control | 000 | 07 | 10/21/10 08:45:43 | 25.10 | 6.55 | 7.76 | 35862 | 22.61 |
| GC-SD326-0.0-0.5 | 001 | 07 | 10/21/10 08:46:25 | 25.09 | 6.60 | 7.94 | 35143 | 22.11 |
| GC-SD328-0.0-0.5 | 002 | 07 | 10/21/10 08:46:54 | 25.18 | 6.67 | 8.14 | 34018 | 21.33 |
| GC-SD330-0.0-0.5 | 003 | 07 | 10/21/10 08:47:18 | 25.08 | 6.67 | 8.06 | 33218 | 20.78 |
| GC-SD333-0.0-0.5 | 004 | 07 | 10/21/10 08:47:36 | 25.13 | 6.70 | 8.09 | 32683 | 20.41 |
| GC-SD329-0.0-0.5 | 005 | 07 | 10/21/10 08:47:57 | 25.19 | 6.74 | 8.02 | 33989 | 21.31 |
| GC-SD303-0.0-0.5 | 006 | 07 | 10/21/10 08:48:20 | 25.22 | 6.83 | 7.97 | 33426 | 20.92 |
| GC-SD307A-0.0-0.5 | 007 | 07 | 10/21/10 08:48:43 | 25.26 | 6.78 | 7.97 | 32944 | 20.58 |
| GC-SD309-0.0-0.5 | 008 | 07 | 10/21/10 08:49:07 | 25.30 | 6.78 | 8.11 | 33255 | 20.80 |
| GC-SD313-0.0-0.5 | 009 | 07 | 10/21/10 08:49:43 | 25.29 | 6.73 | 8.18 | 32494 | 20.27 |
| GC-SD314-0.0-0.5 | 010 | 07 | 10/21/10 08:50:16 | 25.20 | 6.62 | 7.82 | 32697 | 20.42 |
| GC-SD315-0.0-0.5 | 011 | 07 | 10/21/10 08:50:43 | 25.24 | 6.61 | 7.72 | 32527 | 20.30 |
| GC-SD307B-0.0-0.5 | 012 | 07 | 10/21/10 08:51:12 | 25.19 | 6.65 | 7.78 | 32647 | 20.38 |
| GC-SD324-0.0-0.5 | 013 | 07 | 10/21/10 08:51:34 | 25.23 | 6.64 | 7.89 | 32527 | 20.30 |
| GC-SD321-0.0-0.5 | 014 | 07 | 10/21/10 08:51:57 | 25.27 | 6.76 | 8.03 | 32414 | 20.22 |
| GC-SD319-0.0-0.5 | 015 | 07 | 10/21/10 08:52:22 | 25.28 | 6.69 | 8.03 | 32591 | 20.34 |
| GC-SD318-0.0-0.5 | 016 | 07 | 10/21/10 08:52:45 | 25.26 | 6.60 | 8.07 | 32348 | 20.17 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD310-0.0-0.5 | 017 | 07 | 10/21/10 08:53:15 | 25.34 | 6.63 | 8.10 | 32342 | 20.17 |
| | | | | | | | | |
| Laboratory Control | 000 | 08 | 10/22/10 08:26:35 | 24.77 | 6.68 | 7.75 | 35388 | 22.29 |
| GC-SD326-0.0-0.5 | 001 | 08 | 10/22/10 08:27:12 | 25.03 | 6.66 | 7.93 | 34135 | 21.41 |
| GC-SD328-0.0-0.5 | 002 | 08 | 10/22/10 08:27:24 | 25.11 | 6.74 | 8.04 | 33504 | 20.97 |
| GC-SD330-0.0-0.5 | 003 | 08 | 10/22/10 08:27:34 | 25.09 | 6.78 | 8.04 | 32656 | 20.39 |
| GC-SD333-0.0-0.5 | 004 | 08 | 10/22/10 08:27:49 | 25.13 | 6.78 | 7.99 | 32211 | 20.08 |
| GC-SD329-0.0-0.5 | 005 | 08 | 10/22/10 08:28:02 | 25.14 | 6.77 | 7.97 | 33218 | 20.78 |
| GC-SD303-0.0-0.5 | 006 | 08 | 10/22/10 08:28:13 | 25.13 | 6.81 | 7.93 | 32718 | 20.43 |
| GC-SD307A-0.0-0.5 | 007 | 08 | 10/22/10 08:28:23 | 25.11 | 6.84 | 7.89 | 32437 | 20.24 |
| GC-SD309-0.0-0.5 | 008 | 08 | 10/22/10 08:28:37 | 25.09 | 6.88 | 8.03 | 32635 | 20.38 |
| GC-SD313-0.0-0.5 | 009 | 08 | 10/22/10 08:28:49 | 25.08 | 6.91 | 8.13 | 32134 | 20.03 |
| GC-SD314-0.0-0.5 | 010 | 08 | 10/22/10 08:29:00 | 25.05 | 6.89 | 8.08 | 32630 | 20.37 |
| GC-SD315-0.0-0.5 | 011 | 08 | 10/22/10 08:29:08 | 25.04 | 6.86 | 7.93 | 32388 | 20.21 |
| GC-SD307B-0.0-0.5 | 012 | 08 | 10/22/10 08:29:21 | 25.04 | 6.86 | 7.82 | 32453 | 20.25 |
| GC-SD324-0.0-0.5 | 013 | 08 | 10/22/10 08:29:34 | 25.10 | 6.83 | 7.88 | 32424 | 20.23 |
| GC-SD321-0.0-0.5 | 014 | 08 | 10/22/10 08:29:42 | 25.10 | 6.86 | 7.96 | 32243 | 20.11 |
| GC-SD319-0.0-0.5 | 015 | 08 | 10/22/10 08:29:51 | 25.09 | 6.86 | 7.99 | 32563 | 20.33 |
| GC-SD318-0.0-0.5 | 016 | 08 | 10/22/10 08:30:02 | 25.12 | 6.95 | 8.05 | 32290 | 20.14 |
| GC-SD310-0.0-0.5 | 017 | 08 | 10/22/10 08:30:15 | 25.12 | 6.93 | 8.11 | 32360 | 20.19 |
| | | | | | | | | |
| Laboratory Control | 000 | 09 | 10/23/10 09:34:09 | 24.28 | 6.85 | 7.81 | 35036 | 22.05 |
| GC-SD326-0.0-0.5 | 001 | 09 | 10/23/10 09:34:37 | 24.37 | 6.91 | 7.99 | 33113 | 20.72 |
| GC-SD328-0.0-0.5 | 002 | 09 | 10/23/10 09:35:07 | 24.49 | 6.94 | 8.13 | 32262 | 20.13 |
| GC-SD330-0.0-0.5 | 003 | 09 | 10/23/10 09:35:31 | 24.32 | 7.00 | 8.12 | 31603 | 19.68 |
| GC-SD333-0.0-0.5 | 004 | 09 | 10/23/10 09:36:04 | 24.40 | 6.97 | 8.03 | 31042 | 19.29 |
| GC-SD329-0.0-0.5 | 005 | 09 | 10/23/10 09:36:27 | 24.46 | 6.97 | 8.01 | 31863 | 19.86 |
| GC-SD303-0.0-0.5 | 006 | 09 | 10/23/10 09:36:54 | 24.50 | 7.03 | 7.99 | 31264 | 19.44 |
| GC-SD307A-0.0-0.5 | 007 | 09 | 10/23/10 09:37:17 | 24.50 | 7.01 | 7.98 | 30960 | 19.24 |
| GC-SD309-0.0-0.5 | 008 | 09 | 10/23/10 09:37:36 | 24.58 | 7.00 | 8.08 | 30909 | 19.20 |
| GC-SD313-0.0-0.5 | 009 | 09 | 10/23/10 09:37:57 | 24.60 | 7.10 | 8.14 | 30476 | 18.90 |
| GC-SD314-0.0-0.5 | 010 | 09 | 10/23/10 09:38:22 | 24.58 | 6.98 | 7.92 | 30872 | 19.17 |
| GC-SD315-0.0-0.5 | 011 | 09 | 10/23/10 09:38:45 | 24.57 | 6.97 | 7.79 | 30589 | 18.98 |
| GC-SD307B-0.0-0.5 | 012 | 09 | 10/23/10 09:39:04 | 24.56 | 6.94 | 7.81 | 30563 | 18.96 |
| GC-SD324-0.0-0.5 | 013 | 09 | 10/23/10 09:39:17 | 24.61 | 6.96 | 7.91 | 30632 | 19.01 |
| GC-SD321-0.0-0.5 | 014 | 09 | 10/23/10 09:39:38 | 24.61 | 7.05 | 8.02 | 30357 | 18.82 |
| GC-SD319-0.0-0.5 | 015 | 09 | 10/23/10 09:39:59 | 24.61 | 7.01 | 8.02 | 30546 | 18.95 |
| GC-SD318-0.0-0.5 | 016 | 09 | 10/23/10 09:40:22 | 24.61 | 6.96 | 8.11 | 30154 | 18.68 |
| GC-SD310-0.0-0.5 | 017 | 09 | 10/23/10 09:40:44 | 24.63 | 6.93 | 8.11 | 30294 | 18.78 |
| | | | | | | | | |
| Laboratory Control | 000 | 10 | 10/24/10 12:31:04 | 24.45 | 6.58 | 7.98 | 35920 | 22.66 |
| GC-SD326-0.0-0.5 | 001 | 10 | 10/24/10 12:32:04 | 24.60 | 6.63 | 8.11 | 35147 | 22.12 |
| GC-SD328-0.0-0.5 | 002 | 10 | 10/24/10 12:32:26 | 24.74 | 6.65 | 8.20 | 33901 | 21.26 |
| GC-SD330-0.0-0.5 | 003 | 10 | 10/24/10 12:32:53 | 24.59 | 6.75 | 8.20 | 33286 | 20.83 |
| GC-SD333-0.0-0.5 | 004 | 10 | 10/24/10 12:33:12 | 24.66 | 6.77 | 8.14 | 32669 | 20.41 |
| GC-SD329-0.0-0.5 | 005 | 10 | 10/24/10 12:33:26 | 24.72 | 6.80 | 8.11 | 33527 | 21.00 |
| GC-SD303-0.0-0.5 | 006 | 10 | 10/24/10 12:33:48 | 24.77 | 6.92 | 8.09 | 32693 | 20.42 |
| GC-SD307A-0.0-0.5 | 007 | 10 | 10/24/10 12:34:03 | 24.78 | 6.86 | 8.09 | 32353 | 20.19 |
| GC-SD309-0.0-0.5 | 008 | 10 | 10/24/10 12:34:24 | 24.85 | 6.91 | 8.19 | 32179 | 20.07 |
| GC-SD313-0.0-0.5 | 009 | 10 | 10/24/10 12:34:43 | 24.86 | 6.86 | 8.18 | 31908 | 19.88 |
| GC-SD314-0.0-0.5 | 010 | 10 | 10/24/10 12:35:00 | 24.84 | 6.84 | 8.03 | 32175 | 20.06 |
| GC-SD315-0.0-0.5 | 011 | 10 | 10/24/10 12:35:23 | 24.81 | 6.79 | 7.85 | 31795 | 19.80 |
| GC-SD307B-0.0-0.5 | 012 | 10 | 10/24/10 12:35:43 | 24.82 | 6.83 | 7.90 | 31827 | 19.82 |
| GC-SD324-0.0-0.5 | 013 | 10 | 10/24/10 12:35:59 | 24.87 | 6.86 | 8.01 | 31883 | 19.86 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD321-0.0-0.5 | 014 | 10 | 10/24/10 12:36:21 | 24.89 | 6.91 | 8.09 | 31576 | 19.65 |
| GC-SD319-0.0-0.5 | 015 | 10 | 10/24/10 12:36:39 | 24.90 | 6.88 | 8.09 | 31636 | 19.69 |
| GC-SD318-0.0-0.5 | 016 | 10 | 10/24/10 12:37:10 | 24.90 | 6.65 | 8.20 | 31169 | 19.37 |
| GC-SD310-0.0-0.5 | 017 | 10 | 10/24/10 12:37:35 | 24.91 | 6.72 | 8.17 | 31362 | 19.50 |
| | | | | | | | | |
| Laboratory Control | 000 | 11 | 10/25/10 10:53:25 | 24.71 | 6.64 | 8.02 | 33685 | 21.11 |
| GC-SD326-0.0-0.5 | 001 | 11 | 10/25/10 10:54:40 | 24.94 | 6.75 | 8.19 | 33908 | 21.26 |
| GC-SD328-0.0-0.5 | 002 | 11 | 10/25/10 10:55:00 | 25.28 | 6.71 | 8.17 | 34272 | 21.50 |
| GC-SD330-0.0-0.5 | 003 | 11 | 10/25/10 10:55:11 | 25.26 | 6.75 | 8.14 | 33774 | 21.16 |
| GC-SD333-0.0-0.5 | 004 | 11 | 10/25/10 10:55:23 | 25.29 | 6.76 | 8.11 | 33581 | 21.02 |
| GC-SD329-0.0-0.5 | 005 | 11 | 10/25/10 10:55:37 | 25.37 | 6.80 | 8.11 | 33768 | 21.15 |
| GC-SD303-0.0-0.5 | 006 | 11 | 10/25/10 10:55:45 | 25.36 | 6.86 | 8.13 | 33535 | 20.99 |
| GC-SD307A-0.0-0.5 | 007 | 11 | 10/25/10 10:55:55 | 25.41 | 6.87 | 8.14 | 33245 | 20.79 |
| GC-SD309-0.0-0.5 | 008 | 11 | 10/25/10 10:56:02 | 25.45 | 6.85 | 8.18 | 33094 | 20.68 |
| GC-SD313-0.0-0.5 | 009 | 11 | 10/25/10 10:56:11 | 25.49 | 6.88 | 8.21 | 32948 | 20.58 |
| GC-SD314-0.0-0.5 | 010 | 11 | 10/25/10 10:56:20 | 25.46 | 6.90 | 8.09 | 32888 | 20.54 |
| GC-SD315-0.0-0.5 | 011 | 11 | 10/25/10 10:56:30 | 25.41 | 6.89 | 7.94 | 32585 | 20.34 |
| GC-SD307B-0.0-0.5 | 012 | 11 | 10/25/10 10:56:37 | 25.39 | 6.86 | 7.89 | 32688 | 20.41 |
| GC-SD324-0.0-0.5 | 013 | 11 | 10/25/10 10:56:48 | 25.41 | 6.95 | 8.02 | 32692 | 20.41 |
| GC-SD321-0.0-0.5 | 014 | 11 | 10/25/10 10:56:58 | 25.39 | 6.96 | 8.14 | 32551 | 20.31 |
| GC-SD319-0.0-0.5 | 015 | 11 | 10/25/10 10:57:05 | 25.41 | 6.95 | 8.16 | 32549 | 20.31 |
| GC-SD318-0.0-0.5 | 016 | 11 | 10/25/10 10:57:12 | 25.42 | 6.94 | 8.17 | 32221 | 20.08 |
| GC-SD310-0.0-0.5 | 017 | 11 | 10/25/10 10:57:19 | 25.43 | 6.92 | 8.17 | 32398 | 20.21 |
| | | | | | | | | |
| Laboratory Control | 000 | 12 | 10/26/10 08:28:27 | 25.75 | 6.55 | 7.75 | 33295 | 20.82 |
| GC-SD326-0.0-0.5 | 001 | 12 | 10/26/10 08:28:53 | 25.90 | 6.51 | 7.89 | 32769 | 20.45 |
| GC-SD328-0.0-0.5 | 002 | 12 | 10/26/10 08:29:07 | 26.02 | 6.59 | 8.00 | 32489 | 20.26 |
| GC-SD330-0.0-0.5 | 003 | 12 | 10/26/10 08:29:19 | 25.97 | 6.60 | 8.03 | 32128 | 20.01 |
| GC-SD333-0.0-0.5 | 004 | 12 | 10/26/10 08:29:39 | 26.01 | 6.68 | 7.98 | 29927 | 18.50 |
| GC-SD329-0.0-0.5 | 005 | 12 | 10/26/10 08:29:48 | 26.01 | 6.68 | 7.96 | 31913 | 19.86 |
| GC-SD303-0.0-0.5 | 006 | 12 | 10/26/10 08:29:57 | 26.04 | 6.72 | 7.97 | 31591 | 19.64 |
| GC-SD307A-0.0-0.5 | 007 | 12 | 10/26/10 08:30:10 | 26.11 | 6.70 | 7.95 | 31211 | 19.38 |
| GC-SD309-0.0-0.5 | 008 | 12 | 10/26/10 08:30:20 | 26.18 | 6.67 | 7.98 | 31028 | 19.25 |
| GC-SD313-0.0-0.5 | 009 | 12 | 10/26/10 08:30:29 | 26.22 | 6.72 | 8.02 | 30911 | 19.17 |
| GC-SD314-0.0-0.5 | 010 | 12 | 10/26/10 08:30:40 | 26.21 | 6.74 | 7.96 | 31292 | 19.43 |
| GC-SD315-0.0-0.5 | 011 | 12 | 10/26/10 08:30:48 | 26.20 | 6.71 | 7.88 | 31226 | 19.39 |
| GC-SD307B-0.0-0.5 | 012 | 12 | 10/26/10 08:30:59 | 26.16 | 6.67 | 7.83 | 31366 | 19.48 |
| GC-SD324-0.0-0.5 | 013 | 12 | 10/26/10 08:31:08 | 26.17 | 6.70 | 7.89 | 31227 | 19.39 |
| GC-SD321-0.0-0.5 | 014 | 12 | 10/26/10 08:31:19 | 26.15 | 6.72 | 7.97 | 31264 | 19.41 |
| GC-SD319-0.0-0.5 | 015 | 12 | 10/26/10 08:31:28 | 26.15 | 6.75 | 8.00 | 30054 | 18.59 |
| GC-SD318-0.0-0.5 | 016 | 12 | 10/26/10 08:31:37 | 26.11 | 6.77 | 8.05 | 29681 | 18.34 |
| GC-SD310-0.0-0.5 | 017 | 12 | 10/26/10 08:31:46 | 26.12 | 6.73 | 8.08 | 29803 | 18.42 |
| | | | | | | | | |
| Laboratory Control | 000 | 13 | 10/27/10 09:37:01 | 26.33 | 6.88 | 7.92 | 35154 | 22.09 |
| GC-SD326-0.0-0.5 | 001 | 13 | 10/27/10 09:37:29 | 26.35 | 6.83 | 8.02 | 33849 | 21.19 |
| GC-SD328-0.0-0.5 | 002 | 13 | 10/27/10 09:37:52 | 26.42 | 7.00 | 8.13 | 33430 | 20.90 |
| GC-SD330-0.0-0.5 | 003 | 13 | 10/27/10 09:38:23 | 26.32 | 6.82 | 8.09 | 32898 | 20.53 |
| GC-SD333-0.0-0.5 | 004 | 13 | 10/27/10 09:38:51 | 26.41 | 6.88 | 8.06 | 32193 | 20.05 |
| GC-SD329-0.0-0.5 | 005 | 13 | 10/27/10 09:39:11 | 26.41 | 6.99 | 8.02 | 32812 | 20.47 |
| GC-SD303-0.0-0.5 | 006 | 13 | 10/27/10 09:39:38 | 26.44 | 7.01 | 8.06 | 32001 | 19.91 |
| GC-SD307A-0.0-0.5 | 007 | 13 | 10/27/10 09:39:55 | 26.47 | 6.94 | 7.97 | 31787 | 19.77 |
| GC-SD309-0.0-0.5 | 008 | 13 | 10/27/10 09:40:15 | 26.54 | 6.94 | 8.12 | 31378 | 19.49 |
| GC-SD313-0.0-0.5 | 009 | 13 | 10/27/10 09:40:35 | 26.55 | 7.00 | 8.07 | 31098 | 19.29 |
| GC-SD314-0.0-0.5 | 010 | 13 | 10/27/10 09:40:51 | 26.56 | 6.97 | 7.95 | 31735 | 19.73 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD315-0.0-0.5 | 011 | 13 | 10/27/10 09:41:07 | 26.55 | 6.94 | 7.85 | 31279 | 19.42 |
| GC-SD307B-0.0-0.5 | 012 | 13 | 10/27/10 09:41:29 | 26.52 | 6.99 | 7.90 | 31170 | 19.34 |
| GC-SD324-0.0-0.5 | 013 | 13 | 10/27/10 09:41:50 | 26.55 | 6.96 | 8.03 | 31334 | 19.46 |
| GC-SD321-0.0-0.5 | 014 | 13 | 10/27/10 09:42:05 | 26.53 | 6.96 | 8.05 | 30951 | 19.19 |
| GC-SD319-0.0-0.5 | 015 | 13 | 10/27/10 09:42:25 | 26.52 | 6.98 | 8.07 | 30892 | 19.15 |
| GC-SD318-0.0-0.5 | 016 | 13 | 10/27/10 09:42:42 | 26.48 | 6.95 | 8.15 | 30279 | 18.74 |
| GC-SD310-0.0-0.5 | 017 | 13 | 10/27/10 09:42:57 | 26.49 | 6.91 | 8.12 | 30338 | 18.78 |
| | | | | | | | | |
| Laboratory Control | 000 | 14 | 10/28/10 07:43:09 | 26.21 | 6.65 | 7.85 | 36393 | 22.96 |
| GC-SD326-0.0-0.5 | 001 | 14 | 10/28/10 07:43:37 | 26.22 | 6.55 | 7.96 | 35433 | 22.29 |
| GC-SD328-0.0-0.5 | 002 | 14 | 10/28/10 07:43:57 | 26.31 | 6.60 | 8.05 | 34805 | 21.85 |
| GC-SD330-0.0-0.5 | 003 | 14 | 10/28/10 07:44:20 | 26.22 | 6.57 | 8.04 | 34284 | 21.49 |
| GC-SD333-0.0-0.5 | 004 | 14 | 10/28/10 07:44:43 | 26.32 | 6.71 | 8.01 | 33738 | 21.11 |
| GC-SD329-0.0-0.5 | 005 | 14 | 10/28/10 07:45:14 | 26.33 | 6.78 | 7.93 | 34087 | 21.35 |
| GC-SD303-0.0-0.5 | 006 | 14 | 10/28/10 07:45:34 | 26.34 | 6.73 | 7.98 | 33701 | 21.09 |
| GC-SD307A-0.0-0.5 | 007 | 14 | 10/28/10 07:46:09 | 26.40 | 6.52 | 7.84 | 33289 | 20.80 |
| GC-SD309-0.0-0.5 | 008 | 14 | 10/28/10 07:46:36 | 26.49 | 6.75 | 8.07 | 32975 | 20.58 |
| GC-SD313-0.0-0.5 | 009 | 14 | 10/28/10 07:46:57 | 26.48 | 6.82 | 7.99 | 32791 | 20.46 |
| GC-SD314-0.0-0.5 | 010 | 14 | 10/28/10 07:47:32 | 26.49 | 6.77 | 7.84 | 33070 | 20.65 |
| GC-SD315-0.0-0.5 | 011 | 14 | 10/28/10 07:47:58 | 26.47 | 6.62 | 7.79 | 32783 | 20.45 |
| GC-SD307B-0.0-0.5 | 012 | 14 | 10/28/10 07:48:15 | 26.45 | 6.60 | 7.83 | 32788 | 20.45 |
| GC-SD324-0.0-0.5 | 013 | 14 | 10/28/10 07:48:30 | 26.47 | 6.65 | 7.93 | 32786 | 20.45 |
| GC-SD321-0.0-0.5 | 014 | 14 | 10/28/10 07:48:48 | 26.44 | 6.71 | 8.00 | 32679 | 20.38 |
| GC-SD319-0.0-0.5 | 015 | 14 | 10/28/10 07:49:06 | 26.41 | 6.73 | 8.01 | 32680 | 20.38 |
| GC-SD318-0.0-0.5 | 016 | 14 | 10/28/10 07:49:25 | 26.40 | 6.68 | 8.11 | 32290 | 20.11 |
| GC-SD310-0.0-0.5 | 017 | 14 | 10/28/10 07:49:45 | 26.41 | 6.63 | 8.05 | 32364 | 20.16 |
| | | | | | | | | |
| Laboratory Control | 000 | 15 | 10/29/10 10:52:10 | 24.41 | 6.81 | 8.00 | 34440 | 21.63 |
| GC-SD326-0.0-0.5 | 001 | 15 | 10/29/10 10:52:33 | 24.51 | 6.68 | 8.05 | 34827 | 21.90 |
| GC-SD328-0.0-0.5 | 002 | 15 | 10/29/10 10:52:54 | 24.63 | 6.79 | 8.15 | 34413 | 21.61 |
| GC-SD330-0.0-0.5 | 003 | 15 | 10/29/10 10:53:09 | 24.53 | 6.82 | 8.15 | 33903 | 21.26 |
| GC-SD333-0.0-0.5 | 004 | 15 | 10/29/10 10:53:29 | 24.57 | 6.89 | 8.13 | 33676 | 21.10 |
| GC-SD329-0.0-0.5 | 005 | 15 | 10/29/10 10:54:22 | 24.59 | 6.94 | 8.10 | 34056 | 21.36 |
| GC-SD303-0.0-0.5 | 006 | 15 | 10/29/10 10:54:35 | 24.60 | 6.98 | 8.13 | 33443 | 20.94 |
| GC-SD307A-0.0-0.5 | 007 | 15 | 10/29/10 10:54:47 | 24.63 | 6.95 | 8.05 | 33128 | 20.72 |
| GC-SD309-0.0-0.5 | 008 | 15 | 10/29/10 10:55:05 | 24.73 | 6.94 | 8.14 | 32779 | 20.48 |
| GC-SD313-0.0-0.5 | 009 | 15 | 10/29/10 10:55:20 | 24.78 | 6.99 | 8.10 | 32446 | 20.25 |
| GC-SD314-0.0-0.5 | 010 | 15 | 10/29/10 10:55:31 | 24.75 | 6.99 | 8.05 | 32535 | 20.31 |
| GC-SD315-0.0-0.5 | 011 | 15 | 10/29/10 10:55:42 | 24.74 | 6.98 | 7.98 | 32282 | 20.14 |
| GC-SD307B-0.0-0.5 | 012 | 15 | 10/29/10 10:55:52 | 24.74 | 6.92 | 7.97 | 32223 | 20.10 |
| GC-SD324-0.0-0.5 | 013 | 15 | 10/29/10 10:56:03 | 24.74 | 6.94 | 8.07 | 32269 | 20.13 |
| GC-SD321-0.0-0.5 | 014 | 15 | 10/29/10 10:56:14 | 24.74 | 7.00 | 8.13 | 32020 | 19.96 |
| GC-SD319-0.0-0.5 | 015 | 15 | 10/29/10 10:56:24 | 24.71 | 7.02 | 8.13 | 32166 | 20.06 |
| GC-SD318-0.0-0.5 | 016 | 15 | 10/29/10 10:56:40 | 24.75 | 6.95 | 8.26 | 31829 | 19.83 |
| GC-SD310-0.0-0.5 | 017 | 15 | 10/29/10 10:56:49 | 24.76 | 6.90 | 8.26 | 31926 | 19.89 |
| | | | | | | | | |
| Laboratory Control | 000 | 16 | 10/30/10 09:09:08 | 23.81 | 7.04 | 7.65 | 33649 | 21.10 |
| GC-SD326-0.0-0.5 | 001 | 16 | 10/30/10 09:09:32 | 23.89 | 7.01 | 7.86 | 33468 | 20.97 |
| GC-SD328-0.0-0.5 | 002 | 16 | 10/30/10 09:10:05 | 23.98 | 7.00 | 7.99 | 32842 | 20.54 |
| GC-SD330-0.0-0.5 | 003 | 16 | 10/30/10 09:10:25 | 23.86 | 7.00 | 7.98 | 32415 | 20.24 |
| GC-SD333-0.0-0.5 | 004 | 16 | 10/30/10 09:10:45 | 23.92 | 7.02 | 7.92 | 31865 | 19.87 |
| GC-SD329-0.0-0.5 | 005 | 16 | 10/30/10 09:12:40 | 23.96 | 7.28 | 7.91 | 32312 | 20.17 |
| GC-SD303-0.0-0.5 | 006 | 16 | 10/30/10 09:13:04 | 23.97 | 7.26 | 7.97 | 31522 | 19.63 |
| GC-SD307A-0.0-0.5 | 007 | 16 | 10/30/10 09:13:21 | 24.00 | 7.25 | 7.88 | 31279 | 19.46 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD309-0.0-0.5 | 008 | 16 | 10/30/10 09:13:59 | 24.09 | 7.17 | 7.95 | 30911 | 19.21 |
| GC-SD313-0.0-0.5 | 009 | 16 | 10/30/10 09:14:24 | 24.12 | 7.19 | 7.86 | 30527 | 18.95 |
| GC-SD314-0.0-0.5 | 010 | 16 | 10/30/10 09:14:40 | 24.07 | 7.19 | 7.83 | 30676 | 19.05 |
| GC-SD315-0.0-0.5 | 011 | 16 | 10/30/10 09:15:00 | 24.05 | 7.15 | 7.74 | 30467 | 18.91 |
| GC-SD307B-0.0-0.5 | 012 | 16 | 10/30/10 09:15:20 | 24.03 | 7.12 | 7.76 | 30335 | 18.82 |
| GC-SD324-0.0-0.5 | 013 | 16 | 10/30/10 09:15:56 | 24.06 | 7.11 | 7.90 | 30437 | 18.89 |
| GC-SD321-0.0-0.5 | 014 | 16 | 10/30/10 09:16:32 | 24.06 | 7.22 | 7.87 | 30227 | 18.74 |
| GC-SD319-0.0-0.5 | 015 | 16 | 10/30/10 09:16:52 | 24.01 | 7.19 | 7.86 | 30168 | 18.70 |
| GC-SD318-0.0-0.5 | 016 | 16 | 10/30/10 09:17:14 | 24.01 | 7.18 | 7.96 | 29900 | 18.52 |
| GC-SD310-0.0-0.5 | 017 | 16 | 10/30/10 09:17:35 | 24.03 | 7.17 | 7.93 | 30061 | 18.63 |
| | | | | | | | | |
| Laboratory Control | 000 | 17 | 10/31/10 11:43:03 | 24.28 | 6.67 | 7.82 | 34738 | 21.84 |
| GC-SD326-0.0-0.5 | 001 | 17 | 10/31/10 11:43:41 | 24.30 | 6.64 | 7.95 | 34616 | 21.76 |
| GC-SD328-0.0-0.5 | 002 | 17 | 10/31/10 11:44:01 | 24.37 | 6.71 | 8.05 | 33755 | 21.16 |
| GC-SD330-0.0-0.5 | 003 | 17 | 10/31/10 11:44:23 | 24.23 | 6.69 | 8.03 | 33359 | 20.89 |
| GC-SD333-0.0-0.5 | 004 | 17 | 10/31/10 11:44:44 | 24.31 | 6.87 | 7.99 | 32640 | 20.39 |
| GC-SD329-0.0-0.5 | 005 | 17 | 10/31/10 11:45:02 | 24.34 | 6.99 | 7.99 | 33246 | 20.81 |
| GC-SD303-0.0-0.5 | 006 | 17 | 10/31/10 11:45:20 | 24.34 | 7.00 | 8.03 | 32502 | 20.30 |
| GC-SD307A-0.0-0.5 | 007 | 17 | 10/31/10 11:45:48 | 24.40 | 6.80 | 7.87 | 32219 | 20.10 |
| GC-SD309-0.0-0.5 | 008 | 17 | 10/31/10 11:47:06 | 24.47 | 6.79 | 7.97 | 31830 | 19.83 |
| GC-SD313-0.0-0.5 | 009 | 17 | 10/31/10 11:47:23 | 24.49 | 6.96 | 7.94 | 31380 | 19.52 |
| GC-SD314-0.0-0.5 | 010 | 17 | 10/31/10 11:47:41 | 24.45 | 6.99 | 7.90 | 31507 | 19.61 |
| GC-SD315-0.0-0.5 | 011 | 17 | 10/31/10 11:48:06 | 24.46 | 6.90 | 7.77 | 31236 | 19.43 |
| GC-SD307B-0.0-0.5 | 012 | 17 | 10/31/10 11:48:28 | 24.42 | 6.97 | 7.84 | 31169 | 19.38 |
| GC-SD324-0.0-0.5 | 013 | 17 | 10/31/10 11:48:53 | 24.49 | 6.88 | 7.93 | 31201 | 19.40 |
| GC-SD321-0.0-0.5 | 014 | 17 | 10/31/10 11:49:11 | 24.50 | 6.90 | 7.97 | 30975 | 19.25 |
| GC-SD319-0.0-0.5 | 015 | 17 | 10/31/10 11:49:32 | 24.47 | 6.98 | 7.96 | 31045 | 19.29 |
| GC-SD318-0.0-0.5 | 016 | 17 | 10/31/10 11:49:59 | 24.50 | 6.84 | 8.06 | 30832 | 19.15 |
| GC-SD310-0.0-0.5 | 017 | 17 | 10/31/10 11:50:23 | 24.49 | 6.88 | 8.00 | 30989 | 19.26 |
| | | | | | | | | |
| Laboratory Control | 000 | 18 | 11/01/10 10:25:41 | 23.07 | 7.42 | 8.09 | 34550 | 21.73 |
| GC-SD326-0.0-0.5 | 001 | 18 | 11/01/10 10:26:31 | 23.08 | 7.30 | 8.18 | 34736 | 21.86 |
| GC-SD328-0.0-0.5 | 002 | 18 | 11/01/10 10:26:48 | 23.14 | 7.34 | 8.25 | 34242 | 21.52 |
| GC-SD330-0.0-0.5 | 003 | 18 | 11/01/10 10:27:03 | 23.03 | 7.37 | 8.22 | 33979 | 21.34 |
| GC-SD333-0.0-0.5 | 004 | 18 | 11/01/10 10:27:16 | 23.05 | 7.37 | 8.18 | 33350 | 20.90 |
| GC-SD329-0.0-0.5 | 005 | 18 | 11/01/10 10:27:31 | 23.08 | 7.42 | 8.17 | 34267 | 21.54 |
| GC-SD303-0.0-0.5 | 006 | 18 | 11/01/10 10:27:41 | 23.08 | 7.50 | 8.20 | 33526 | 21.02 |
| GC-SD307A-0.0-0.5 | 007 | 18 | 11/01/10 10:27:54 | 23.10 | 7.47 | 8.13 | 33124 | 20.74 |
| GC-SD309-0.0-0.5 | 008 | 18 | 11/01/10 10:28:07 | 23.18 | 7.41 | 8.15 | 32716 | 20.46 |
| GC-SD313-0.0-0.5 | 009 | 18 | 11/01/10 10:28:22 | 23.21 | 7.47 | 8.13 | 32178 | 20.09 |
| GC-SD314-0.0-0.5 | 010 | 18 | 11/01/10 10:28:32 | 23.18 | 7.49 | 8.10 | 32319 | 20.19 |
| GC-SD315-0.0-0.5 | 011 | 18 | 11/01/10 10:28:43 | 23.18 | 7.50 | 8.05 | 32090 | 20.03 |
| GC-SD307B-0.0-0.5 | 012 | 18 | 11/01/10 10:28:53 | 23.15 | 7.46 | 8.04 | 32058 | 20.01 |
| GC-SD324-0.0-0.5 | 013 | 18 | 11/01/10 10:29:07 | 23.20 | 7.48 | 8.13 | 32038 | 19.99 |
| GC-SD321-0.0-0.5 | 014 | 18 | 11/01/10 10:29:19 | 23.23 | 7.48 | 8.19 | 31840 | 19.86 |
| GC-SD319-0.0-0.5 | 015 | 18 | 11/01/10 10:29:31 | 23.21 | 7.47 | 8.19 | 32292 | 20.17 |
| GC-SD318-0.0-0.5 | 016 | 18 | 11/01/10 10:29:42 | 23.21 | 7.46 | 8.23 | 32218 | 20.12 |
| GC-SD310-0.0-0.5 | 017 | 18 | 11/01/10 10:30:04 | 23.23 | 7.43 | 8.22 | 32301 | 20.18 |
| | | | | | | | | |
| Laboratory Control | 000 | 19 | 11/02/10 08:39:56 | 23.57 | 7.10 | 7.92 | 35394 | 22.31 |
| GC-SD326-0.0-0.5 | 001 | 19 | 11/02/10 08:40:27 | 23.54 | 7.05 | 8.07 | 34866 | 21.94 |
| GC-SD328-0.0-0.5 | 002 | 19 | 11/02/10 08:40:48 | 23.61 | 7.10 | 8.15 | 34156 | 21.45 |
| GC-SD330-0.0-0.5 | 003 | 19 | 11/02/10 08:41:12 | 23.43 | 7.05 | 8.05 | 33844 | 21.24 |
| GC-SD333-0.0-0.5 | 004 | 19 | 11/02/10 08:41:36 | 23.51 | 7.11 | 8.01 | 32990 | 20.65 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD329-0.0-0.5 | 005 | 19 | 11/02/10 08:42:06 | 23.53 | 7.03 | 7.92 | 34355 | 21.59 |
| GC-SD303-0.0-0.5 | 006 | 19 | 11/02/10 08:42:33 | 23.54 | 7.12 | 8.06 | 33371 | 20.91 |
| GC-SD307A-0.0-0.5 | 007 | 19 | 11/02/10 08:43:00 | 23.56 | 7.04 | 7.95 | 32935 | 20.61 |
| GC-SD309-0.0-0.5 | 008 | 19 | 11/02/10 08:43:27 | 23.66 | 6.62 | 7.82 | 32461 | 20.28 |
| GC-SD313-0.0-0.5 | 009 | 19 | 11/02/10 08:43:54 | 23.60 | 6.96 | 7.92 | 31983 | 19.95 |
| GC-SD314-0.0-0.5 | 010 | 19 | 11/02/10 08:44:22 | 23.52 | 7.20 | 7.90 | 31959 | 19.94 |
| GC-SD315-0.0-0.5 | 011 | 19 | 11/02/10 08:44:39 | 23.53 | 7.18 | 7.84 | 31731 | 19.78 |
| GC-SD307B-0.0-0.5 | 012 | 19 | 11/02/10 08:44:53 | 23.53 | 7.18 | 7.86 | 31644 | 19.72 |
| GC-SD324-0.0-0.5 | 013 | 19 | 11/02/10 08:45:14 | 23.63 | 7.18 | 7.97 | 31719 | 19.77 |
| GC-SD321-0.0-0.5 | 014 | 19 | 11/02/10 08:45:34 | 23.63 | 7.13 | 7.99 | 31429 | 19.57 |
| GC-SD319-0.0-0.5 | 015 | 19 | 11/02/10 08:46:05 | 23.57 | 7.07 | 7.90 | 32427 | 20.26 |
| GC-SD318-0.0-0.5 | 016 | 19 | 11/02/10 08:46:30 | 23.56 | 6.99 | 8.01 | 32416 | 20.25 |
| GC-SD310-0.0-0.5 | 017 | 19 | 11/02/10 08:46:44 | 23.56 | 6.98 | 7.98 | 32500 | 20.31 |
| | | | | | | | | |
| Laboratory Control | 000 | 20 | 11/03/10 08:35:55 | 23.43 | 7.42 | 7.82 | 34565 | 21.74 |
| GC-SD326-0.0-0.5 | 001 | 20 | 11/03/10 08:36:22 | 23.50 | 7.18 | 7.89 | 34894 | 21.96 |
| GC-SD328-0.0-0.5 | 002 | 20 | 11/03/10 08:36:32 | 23.60 | 7.20 | 7.99 | 34124 | 21.43 |
| GC-SD330-0.0-0.5 | 003 | 20 | 11/03/10 08:36:42 | 23.54 | 7.23 | 7.99 | 33864 | 21.25 |
| GC-SD333-0.0-0.5 | 004 | 20 | 11/03/10 08:36:53 | 23.53 | 7.21 | 7.96 | 32857 | 20.55 |
| GC-SD329-0.0-0.5 | 005 | 20 | 11/03/10 08:37:04 | 23.54 | 7.18 | 7.88 | 34204 | 21.48 |
| GC-SD303-0.0-0.5 | 006 | 20 | 11/03/10 08:37:14 | 23.56 | 7.11 | 7.89 | 33334 | 20.88 |
| GC-SD307A-0.0-0.5 | 007 | 20 | 11/03/10 08:37:24 | 23.57 | 7.17 | 7.92 | 32877 | 20.57 |
| GC-SD309-0.0-0.5 | 008 | 20 | 11/03/10 08:37:33 | 23.63 | 7.19 | 7.93 | 32516 | 20.32 |
| GC-SD313-0.0-0.5 | 009 | 20 | 11/03/10 08:37:42 | 23.65 | 7.24 | 7.94 | 31880 | 19.88 |
| GC-SD314-0.0-0.5 | 010 | 20 | 11/03/10 08:37:54 | 23.60 | 7.28 | 7.90 | 31528 | 19.64 |
| GC-SD315-0.0-0.5 | 011 | 20 | 11/03/10 08:38:03 | 23.59 | 7.31 | 7.85 | 31390 | 19.54 |
| GC-SD307B-0.0-0.5 | 012 | 20 | 11/03/10 08:38:13 | 23.56 | 7.39 | 7.83 | 31372 | 19.53 |
| GC-SD324-0.0-0.5 | 013 | 20 | 11/03/10 08:38:24 | 23.61 | 7.42 | 7.89 | 31524 | 19.64 |
| GC-SD321-0.0-0.5 | 014 | 20 | 11/03/10 08:38:34 | 23.64 | 7.40 | 7.93 | 31134 | 19.37 |
| GC-SD319-0.0-0.5 | 015 | 20 | 11/03/10 08:38:46 | 23.64 | 7.31 | 7.91 | 32180 | 20.09 |
| GC-SD318-0.0-0.5 | 016 | 20 | 11/03/10 08:38:55 | 23.60 | 7.38 | 7.92 | 32109 | 20.04 |
| GC-SD310-0.0-0.5 | 017 | 20 | 11/03/10 08:39:09 | 23.65 | 7.38 | 7.95 | 32235 | 20.12 |
| | | | | | | | | |
| Laboratory Control | 000 | 21 | 11/04/10 08:34:32 | 24.41 | 6.90 | 7.80 | 35486 | 22.36 |
| GC-SD326-0.0-0.5 | 001 | 21 | 11/04/10 08:35:14 | 24.47 | 6.87 | 7.95 | 35078 | 22.08 |
| GC-SD328-0.0-0.5 | 002 | 21 | 11/04/10 08:35:44 | 24.66 | 6.90 | 8.05 | 34285 | 21.52 |
| GC-SD330-0.0-0.5 | 003 | 21 | 11/04/10 08:36:14 | 24.49 | 6.76 | 7.96 | 34109 | 21.40 |
| GC-SD333-0.0-0.5 | 004 | 21 | 11/04/10 08:36:42 | 24.55 | 6.78 | 7.84 | 32884 | 20.56 |
| GC-SD329-0.0-0.5 | 005 | 21 | 11/04/10 08:37:08 | 24.58 | 6.55 | 7.68 | 34321 | 21.55 |
| GC-SD303-0.0-0.5 | 006 | 21 | 11/04/10 08:37:52 | 24.60 | 6.94 | 7.98 | 33361 | 20.88 |
| GC-SD307A-0.0-0.5 | 007 | 21 | 11/04/10 08:38:19 | 24.63 | 6.91 | 7.90 | 33027 | 20.65 |
| GC-SD309-0.0-0.5 | 008 | 21 | 11/04/10 08:38:49 | 24.80 | 7.01 | 7.96 | 32532 | 20.31 |
| GC-SD313-0.0-0.5 | 009 | 21 | 11/04/10 08:39:18 | 24.81 | 7.04 | 7.86 | 32065 | 19.99 |
| GC-SD314-0.0-0.5 | 010 | 21 | 11/04/10 08:39:35 | 24.75 | 7.10 | 7.83 | 32007 | 19.95 |
| GC-SD315-0.0-0.5 | 011 | 21 | 11/04/10 08:40:03 | 24.71 | 6.97 | 7.75 | 31908 | 19.88 |
| GC-SD307B-0.0-0.5 | 012 | 21 | 11/04/10 08:40:23 | 24.58 | 6.96 | 7.81 | 31888 | 19.87 |
| GC-SD324-0.0-0.5 | 013 | 21 | 11/04/10 08:40:49 | 24.66 | 6.99 | 7.97 | 31977 | 19.93 |
| GC-SD321-0.0-0.5 | 014 | 21 | 11/04/10 08:41:14 | 24.64 | 7.03 | 7.93 | 31665 | 19.72 |
| GC-SD319-0.0-0.5 | 015 | 21 | 11/04/10 08:41:34 | 24.61 | 7.01 | 7.88 | 32190 | 20.08 |
| GC-SD318-0.0-0.5 | 016 | 21 | 11/04/10 08:41:56 | 24.59 | 6.95 | 7.98 | 32193 | 20.08 |
| GC-SD310-0.0-0.5 | 017 | 21 | 11/04/10 08:42:20 | 24.65 | 6.95 | 7.96 | 32274 | 20.13 |
| | | | | | | | | |
| Laboratory Control | 000 | 22 | 11/05/10 08:07:09 | 25.26 | 6.65 | 7.78 | 34354 | 21.56 |
| GC-SD326-0.0-0.5 | 001 | 22 | 11/05/10 08:07:43 | 25.30 | 6.47 | 7.85 | 34620 | 21.74 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD328-0.0-0.5 | 002 | 22 | 11/05/10 08:08:01 | 25.39 | 6.73 | 8.03 | 34074 | 21.36 |
| GC-SD330-0.0-0.5 | 003 | 22 | 11/05/10 08:08:16 | 25.31 | 6.76 | 7.98 | 33731 | 21.13 |
| GC-SD333-0.0-0.5 | 004 | 22 | 11/05/10 08:08:28 | 25.32 | 6.77 | 7.92 | 32801 | 20.48 |
| GC-SD329-0.0-0.5 | 005 | 22 | 11/05/10 08:08:47 | 25.35 | 6.69 | 7.76 | 33670 | 21.08 |
| GC-SD303-0.0-0.5 | 006 | 22 | 11/05/10 08:08:58 | 25.39 | 6.70 | 7.83 | 32831 | 20.50 |
| GC-SD307A-0.0-0.5 | 007 | 22 | 11/05/10 08:09:10 | 25.39 | 6.84 | 7.91 | 32568 | 20.32 |
| GC-SD309-0.0-0.5 | 008 | 22 | 11/05/10 08:09:29 | 25.49 | 6.92 | 7.98 | 32239 | 20.10 |
| GC-SD313-0.0-0.5 | 009 | 22 | 11/05/10 08:09:46 | 25.56 | 6.96 | 7.89 | 31686 | 19.71 |
| GC-SD314-0.0-0.5 | 010 | 22 | 11/05/10 08:09:59 | 25.52 | 6.99 | 7.85 | 31558 | 19.63 |
| GC-SD315-0.0-0.5 | 011 | 22 | 11/05/10 08:10:12 | 25.51 | 6.96 | 7.79 | 31365 | 19.50 |
| GC-SD307B-0.0-0.5 | 012 | 22 | 11/05/10 08:10:25 | 25.46 | 6.89 | 7.77 | 31304 | 19.45 |
| GC-SD324-0.0-0.5 | 013 | 22 | 11/05/10 08:10:38 | 25.48 | 6.94 | 7.87 | 31430 | 19.54 |
| GC-SD321-0.0-0.5 | 014 | 22 | 11/05/10 08:10:52 | 25.48 | 6.98 | 7.93 | 31086 | 19.31 |
| GC-SD319-0.0-0.5 | 015 | 22 | 11/05/10 08:11:04 | 25.46 | 6.97 | 7.90 | 31663 | 19.70 |
| GC-SD318-0.0-0.5 | 016 | 22 | 11/05/10 08:11:18 | 25.41 | 6.95 | 8.00 | 31579 | 19.64 |
| GC-SD310-0.0-0.5 | 017 | 22 | 11/05/10 08:11:30 | 25.42 | 6.95 | 8.03 | 31604 | 19.66 |
| | | | | | | | | |
| Laboratory Control | 000 | 23 | 11/06/10 07:43:28 | 25.00 | 6.69 | 7.79 | 34715 | 21.81 |
| GC-SD326-0.0-0.5 | 001 | 23 | 11/06/10 07:43:49 | 25.02 | 6.64 | 7.86 | 34508 | 21.67 |
| GC-SD328-0.0-0.5 | 002 | 23 | 11/06/10 07:44:04 | 25.10 | 6.71 | 7.99 | 33870 | 21.23 |
| GC-SD330-0.0-0.5 | 003 | 23 | 11/06/10 07:44:18 | 25.01 | 6.71 | 7.96 | 33607 | 21.05 |
| GC-SD333-0.0-0.5 | 004 | 23 | 11/06/10 07:44:34 | 25.02 | 6.73 | 7.91 | 32740 | 20.45 |
| GC-SD329-0.0-0.5 | 005 | 23 | 11/06/10 07:44:50 | 25.06 | 6.69 | 7.81 | 33410 | 20.91 |
| GC-SD303-0.0-0.5 | 006 | 23 | 11/06/10 07:45:07 | 25.13 | 6.68 | 7.88 | 32587 | 20.34 |
| GC-SD307A-0.0-0.5 | 007 | 23 | 11/06/10 07:45:25 | 25.12 | 6.83 | 7.89 | 32330 | 20.16 |
| GC-SD309-0.0-0.5 | 008 | 23 | 11/06/10 07:45:39 | 25.19 | 6.82 | 7.94 | 32083 | 19.99 |
| GC-SD313-0.0-0.5 | 009 | 23 | 11/06/10 07:45:57 | 25.28 | 6.86 | 7.88 | 31502 | 19.59 |
| GC-SD314-0.0-0.5 | 010 | 23 | 11/06/10 07:46:14 | 25.24 | 6.86 | 7.80 | 31293 | 19.45 |
| GC-SD315-0.0-0.5 | 011 | 23 | 11/06/10 07:46:28 | 25.21 | 6.84 | 7.74 | 31075 | 19.30 |
| GC-SD307B-0.0-0.5 | 012 | 23 | 11/06/10 07:46:42 | 25.18 | 6.76 | 7.74 | 31069 | 19.30 |
| GC-SD324-0.0-0.5 | 013 | 23 | 11/06/10 07:46:57 | 25.21 | 6.81 | 7.84 | 31190 | 19.38 |
| GC-SD321-0.0-0.5 | 014 | 23 | 11/06/10 07:47:13 | 25.21 | 6.89 | 7.91 | 30899 | 19.18 |
| GC-SD319-0.0-0.5 | 015 | 23 | 11/06/10 07:47:29 | 25.15 | 6.90 | 7.86 | 31205 | 19.39 |
| GC-SD318-0.0-0.5 | 016 | 23 | 11/06/10 07:47:46 | 25.13 | 6.92 | 7.97 | 31109 | 19.33 |
| GC-SD310-0.0-0.5 | 017 | 23 | 11/06/10 07:48:02 | 25.17 | 6.99 | 7.99 | 31072 | 19.30 |
| | | | | | | | | |
| Laboratory Control | 000 | 24 | 11/07/10 11:27:05 | 24.55 | 7.06 | 7.83 | 34562 | 21.72 |
| GC-SD326-0.0-0.5 | 001 | 24 | 11/07/10 11:27:31 | 24.68 | 7.08 | 7.94 | 34653 | 21.78 |
| GC-SD328-0.0-0.5 | 002 | 24 | 11/07/10 11:27:53 | 24.80 | 7.17 | 8.12 | 33969 | 21.30 |
| GC-SD330-0.0-0.5 | 003 | 24 | 11/07/10 11:28:08 | 24.70 | 7.13 | 8.04 | 33834 | 21.21 |
| GC-SD333-0.0-0.5 | 004 | 24 | 11/07/10 11:28:23 | 24.72 | 7.13 | 8.01 | 33126 | 20.72 |
| GC-SD329-0.0-0.5 | 005 | 24 | 11/07/10 11:28:33 | 24.72 | 7.20 | 7.96 | 33817 | 21.20 |
| GC-SD303-0.0-0.5 | 006 | 24 | 11/07/10 11:28:46 | 24.79 | 7.24 | 7.99 | 32914 | 20.57 |
| GC-SD307A-0.0-0.5 | 007 | 24 | 11/07/10 11:28:55 | 24.80 | 7.25 | 8.02 | 32666 | 20.40 |
| GC-SD309-0.0-0.5 | 008 | 24 | 11/07/10 11:29:08 | 24.87 | 7.27 | 8.03 | 32410 | 20.22 |
| GC-SD313-0.0-0.5 | 009 | 24 | 11/07/10 11:29:17 | 24.93 | 7.29 | 8.00 | 31758 | 19.78 |
| GC-SD314-0.0-0.5 | 010 | 24 | 11/07/10 11:29:28 | 24.91 | 7.30 | 7.93 | 31668 | 19.71 |
| GC-SD315-0.0-0.5 | 011 | 24 | 11/07/10 11:29:40 | 24.89 | 7.27 | 7.85 | 31378 | 19.52 |
| GC-SD307B-0.0-0.5 | 012 | 24 | 11/07/10 11:29:47 | 24.90 | 7.20 | 7.81 | 31395 | 19.53 |
| GC-SD324-0.0-0.5 | 013 | 24 | 11/07/10 11:29:58 | 24.91 | 7.20 | 7.89 | 31446 | 19.56 |
| GC-SD321-0.0-0.5 | 014 | 24 | 11/07/10 11:30:06 | 24.92 | 7.25 | 7.97 | 31178 | 19.38 |
| GC-SD319-0.0-0.5 | 015 | 24 | 11/07/10 11:30:18 | 24.91 | 7.28 | 7.98 | 31329 | 19.48 |
| GC-SD318-0.0-0.5 | 016 | 24 | 11/07/10 11:30:28 | 24.88 | 7.30 | 8.03 | 31220 | 19.41 |
| GC-SD310-0.0-0.5 | 017 | 24 | 11/07/10 11:30:37 | 24.89 | 7.29 | 8.07 | 31260 | 19.43 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| Laboratory Control | 000 | 25 | 11/08/10 10:57:00 | 25.37 | 6.94 | 7.99 | 35295 | 22.21 |
| GC-SD326-0.0-0.5 | 001 | 25 | 11/08/10 10:57:37 | 25.36 | 6.85 | 8.10 | 35057 | 22.05 |
| GC-SD328-0.0-0.5 | 002 | 25 | 11/08/10 10:58:05 | 25.47 | 6.88 | 8.23 | 34299 | 21.52 |
| GC-SD330-0.0-0.5 | 003 | 25 | 11/08/10 10:58:44 | 25.34 | 6.62 | 8.06 | 34242 | 21.48 |
| GC-SD333-0.0-0.5 | 004 | 25 | 11/08/10 10:59:10 | 25.41 | 6.86 | 8.09 | 33118 | 20.70 |
| GC-SD329-0.0-0.5 | 005 | 25 | 11/08/10 10:59:47 | 25.44 | 6.95 | 8.01 | 33364 | 20.87 |
| GC-SD303-0.0-0.5 | 006 | 25 | 11/08/10 11:00:05 | 25.46 | 6.87 | 8.06 | 33221 | 20.77 |
| GC-SD307A-0.0-0.5 | 007 | 25 | 11/08/10 11:00:26 | 25.46 | 6.92 | 8.16 | 32885 | 20.54 |
| GC-SD309-0.0-0.5 | 008 | 25 | 11/08/10 11:00:43 | 25.53 | 6.93 | 8.13 | 32640 | 20.37 |
| GC-SD313-0.0-0.5 | 009 | 25 | 11/08/10 11:01:06 | 25.60 | 6.92 | 8.01 | 31875 | 19.84 |
| GC-SD314-0.0-0.5 | 010 | 25 | 11/08/10 11:01:24 | 25.56 | 6.93 | 7.98 | 31831 | 19.81 |
| GC-SD315-0.0-0.5 | 011 | 25 | 11/08/10 11:01:45 | 25.55 | 6.77 | 7.89 | 31526 | 19.60 |
| GC-SD307B-0.0-0.5 | 012 | 25 | 11/08/10 11:02:04 | 25.53 | 6.78 | 7.89 | 31571 | 19.64 |
| GC-SD324-0.0-0.5 | 013 | 25 | 11/08/10 11:02:24 | 25.56 | 6.89 | 8.08 | 31586 | 19.65 |
| GC-SD321-0.0-0.5 | 014 | 25 | 11/08/10 11:02:39 | 25.54 | 6.92 | 8.15 | 31371 | 19.50 |
| GC-SD319-0.0-0.5 | 015 | 25 | 11/08/10 11:03:00 | 25.52 | 6.93 | 8.10 | 31418 | 19.53 |
| GC-SD318-0.0-0.5 | 016 | 25 | 11/08/10 11:03:25 | 25.49 | 6.92 | 8.17 | 31279 | 19.44 |
| GC-SD310-0.0-0.5 | 017 | 25 | 11/08/10 11:03:41 | 25.50 | 6.91 | 8.14 | 31324 | 19.47 |
| Laboratory Control | 000 | 26 | 11/09/10 08:42:53 | 25.27 | 6.79 | 7.80 | 33468 | 20.95 |
| GC-SD326-0.0-0.5 | 001 | 26 | 11/09/10 08:43:28 | 25.29 | 6.50 | 7.87 | 34658 | 21.77 |
| GC-SD328-0.0-0.5 | 002 | 26 | 11/09/10 08:43:58 | 25.43 | 6.52 | 8.07 | 33693 | 21.10 |
| GC-SD330-0.0-0.5 | 003 | 26 | 11/09/10 08:44:09 | 25.35 | 6.45 | 8.03 | 33911 | 21.25 |
| GC-SD333-0.0-0.5 | 004 | 26 | 11/09/10 08:44:20 | 25.35 | 6.52 | 7.99 | 32787 | 20.47 |
| GC-SD329-0.0-0.5 | 005 | 26 | 11/09/10 08:44:33 | 25.38 | 6.76 | 7.91 | 33490 | 20.96 |
| GC-SD303-0.0-0.5 | 006 | 26 | 11/09/10 08:44:52 | 25.42 | 6.80 | 7.92 | 32877 | 20.54 |
| GC-SD307A-0.0-0.5 | 007 | 26 | 11/09/10 08:45:04 | 25.44 | 6.84 | 7.96 | 32586 | 20.34 |
| GC-SD309-0.0-0.5 | 008 | 26 | 11/09/10 08:45:18 | 25.46 | 6.88 | 7.97 | 32358 | 20.18 |
| GC-SD313-0.0-0.5 | 009 | 26 | 11/09/10 08:45:29 | 25.49 | 6.88 | 7.93 | 31669 | 19.70 |
| GC-SD314-0.0-0.5 | 010 | 26 | 11/09/10 08:45:41 | 25.53 | 6.91 | 7.87 | 30947 | 19.21 |
| GC-SD315-0.0-0.5 | 011 | 26 | 11/09/10 08:45:52 | 25.55 | 6.90 | 7.82 | 30669 | 19.02 |
| GC-SD307B-0.0-0.5 | 012 | 26 | 11/09/10 08:46:06 | 25.52 | 6.86 | 7.78 | 30654 | 19.01 |
| GC-SD324-0.0-0.5 | 013 | 26 | 11/09/10 08:46:18 | 25.55 | 6.88 | 7.87 | 30777 | 19.09 |
| GC-SD321-0.0-0.5 | 014 | 26 | 11/09/10 08:46:30 | 25.53 | 6.95 | 7.95 | 30450 | 18.87 |
| GC-SD319-0.0-0.5 | 015 | 26 | 11/09/10 08:46:41 | 25.51 | 6.92 | 7.93 | 31121 | 19.33 |
| GC-SD318-0.0-0.5 | 016 | 26 | 11/09/10 08:46:52 | 25.49 | 6.90 | 7.91 | 31032 | 19.27 |
| GC-SD310-0.0-0.5 | 017 | 26 | 11/09/10 08:47:05 | 25.47 | 7.00 | 7.91 | 31024 | 19.26 |
| Laboratory Control | 000 | 27 | 11/10/10 08:23:19 | 25.15 | 6.74 | 7.86 | 34848 | 21.90 |
| GC-SD326-0.0-0.5 | 001 | 27 | 11/10/10 08:24:12 | 25.26 | 6.75 | 8.00 | 34378 | 21.58 |
| GC-SD328-0.0-0.5 | 002 | 27 | 11/10/10 08:24:35 | 25.32 | 6.82 | 8.10 | 34240 | 21.48 |
| GC-SD330-0.0-0.5 | 003 | 27 | 11/10/10 08:24:52 | 25.22 | 6.75 | 8.01 | 34206 | 21.46 |
| GC-SD333-0.0-0.5 | 004 | 27 | 11/10/10 08:25:15 | 25.27 | 6.83 | 8.00 | 33146 | 20.72 |
| GC-SD329-0.0-0.5 | 005 | 27 | 11/10/10 08:25:28 | 25.28 | 6.92 | 7.95 | 33546 | 21.00 |
| GC-SD303-0.0-0.5 | 006 | 27 | 11/10/10 08:25:48 | 25.32 | 6.93 | 7.96 | 32779 | 20.47 |
| GC-SD307A-0.0-0.5 | 007 | 27 | 11/10/10 08:26:02 | 25.33 | 6.97 | 8.02 | 32546 | 20.31 |
| GC-SD309-0.0-0.5 | 008 | 27 | 11/10/10 08:26:14 | 25.34 | 7.00 | 8.02 | 32341 | 20.17 |
| GC-SD313-0.0-0.5 | 009 | 27 | 11/10/10 08:26:24 | 25.38 | 7.00 | 7.98 | 31579 | 19.64 |
| GC-SD314-0.0-0.5 | 010 | 27 | 11/10/10 08:26:37 | 25.39 | 7.04 | 7.94 | 31469 | 19.57 |
| GC-SD315-0.0-0.5 | 011 | 27 | 11/10/10 08:26:55 | 25.43 | 6.93 | 7.84 | 31161 | 19.36 |
| GC-SD307B-0.0-0.5 | 012 | 27 | 11/10/10 08:27:07 | 25.41 | 6.87 | 7.84 | 31182 | 19.37 |
| GC-SD324-0.0-0.5 | 013 | 27 | 11/10/10 08:27:20 | 25.42 | 6.95 | 7.94 | 31256 | 19.42 |
| GC-SD321-0.0-0.5 | 014 | 27 | 11/10/10 08:27:32 | 25.40 | 7.01 | 8.02 | 31033 | 19.27 |

| Field ID | Sample Number | Day | DateTime M/D/Y | Temp C | DO Conc mg/L | pH SU | SpCond uS/cm | Salinity ppt |
|---|---|---|---|---|---|---|---|---|
| GC-SD319-0.0-0.5 | 015 | 27 | 11/10/10 08:27:43 | 25.36 | 7.01 | 7.99 | 31233 | 19.41 |
| GC-SD318-0.0-0.5 | 016 | 27 | 11/10/10 08:27:52 | 25.33 | 7.01 | 7.97 | 31149 | 19.35 |
| GC-SD310-0.0-0.5 | 017 | 27 | 11/10/10 08:28:03 | 25.35 | 7.03 | 7.97 | 31128 | 19.34 |
| | | | | | | | | |
| Laboratory Control | 000 | 28 | 11/11/10 06:28:01 | 23.82 | 6.97 | 7.74 | 34918 | 21.98 |
| GC-SD326-0.0-0.5 | 001 | 28 | 11/11/10 06:29:08 | 23.80 | 6.96 | 7.89 | 34548 | 21.72 |
| GC-SD328-0.0-0.5 | 002 | 28 | 11/11/10 06:29:23 | 23.94 | 6.97 | 7.98 | 34265 | 21.52 |
| GC-SD330-0.0-0.5 | 003 | 28 | 11/11/10 06:29:42 | 23.84 | 6.87 | 7.91 | 34081 | 21.39 |
| GC-SD333-0.0-0.5 | 004 | 28 | 11/11/10 06:30:22 | 23.89 | 7.09 | 7.87 | 32739 | 20.47 |
| GC-SD329-0.0-0.5 | 005 | 28 | 11/11/10 06:30:40 | 23.95 | 7.02 | 7.78 | 33041 | 20.67 |
| GC-SD303-0.0-0.5 | 006 | 28 | 11/11/10 06:31:02 | 23.97 | 7.04 | 7.82 | 32236 | 20.12 |
| GC-SD307A-0.0-0.5 | 007 | 28 | 11/11/10 06:31:30 | 24.00 | 7.08 | 7.93 | 32005 | 19.96 |
| GC-SD309-0.0-0.5 | 008 | 28 | 11/11/10 06:31:46 | 23.99 | 7.08 | 7.91 | 31835 | 19.84 |
| GC-SD313-0.0-0.5 | 009 | 28 | 11/11/10 06:32:03 | 24.06 | 7.08 | 7.84 | 31066 | 19.31 |
| GC-SD314-0.0-0.5 | 010 | 28 | 11/11/10 06:32:27 | 24.04 | 7.11 | 7.81 | 30791 | 19.13 |
| GC-SD315-0.0-0.5 | 011 | 28 | 11/11/10 06:32:50 | 24.11 | 6.96 | 7.75 | 30552 | 18.96 |
| GC-SD307B-0.0-0.5 | 012 | 28 | 11/11/10 06:33:06 | 24.12 | 6.93 | 7.72 | 30411 | 18.87 |
| GC-SD324-0.0-0.5 | 013 | 28 | 11/11/10 06:33:31 | 24.08 | 7.00 | 7.83 | 30675 | 19.05 |
| GC-SD321-0.0-0.5 | 014 | 28 | 11/11/10 06:34:00 | 24.01 | 7.05 | 7.87 | 30318 | 18.81 |
| GC-SD319-0.0-0.5 | 015 | 28 | 11/11/10 06:34:20 | 23.94 | 6.99 | 7.78 | 31317 | 19.49 |
| GC-SD318-0.0-0.5 | 016 | 28 | 11/11/10 06:34:45 | 23.93 | 7.02 | 7.77 | 31267 | 19.45 |
| GC-SD310-0.0-0.5 | 017 | 28 | 11/11/10 06:35:03 | 23.94 | 7.04 | 7.77 | 31362 | 19.52 |

# *Leptocheirus plumulosus* 28 Day Assay

**STUDY NUMBER: 20201** **PROJECT: Gowanus Canal Superfund Site**

**DATE: 11/11/10** **CLIENT: HDR Engineering, Inc.**

| Sample Number | Rep | Survived | Juveniles | Females | Males | Initials |
|---|---|---|---|---|---|---|
| 000 | 1 | 14 | 4 | 7 | 7 | AM |
| 000 | 2 | 15 | 40 | 4 | 11 | |
| 000 | 3 | 20 | 43 | 8 | 12 | |
| 000 | 4 | 19 | 27 | 7 | 12 | |
| 000 | 5 | 17 | 24 | 12 | 5 | |
| 000 | 6 | 17 | 40 | 8 | 9 | |
| 000 | 7 | 14 | 58 | 9 | 5 | |
| 000 | 8 | 14 | 45 | 8 | 6 | |
| 001 | 1 | 19 | 4 | 11 | 8 | |
| 001 | 2 | 16 | 4 | 9 | 7 | |
| 001 | 3 | 14 | 9 | 10 | 4 | |
| 001 | 4 | 16 | 9 | 6 | 10 | |
| 001 | 5 | 18 | 0 | 13 | 5 | |
| 001 | 6 | 19 | 1 | 8 | 11 | |
| 001 | 7 | 11 | 2 | 9 | 2 | |
| 001 | 8 | 0 | - | - | - | |
| 002 | 1 | 16 | 45 | 7 | 9 | |
| 002 | 2 | 17 | 55 | 9 | 8 | |
| 002 | 3 | 18 | 58 | 11 | 7 | |
| 002 | 4 | 17 | 16 | 10 | 7 | |
| 002 | 5 | 19 | 27 | 10 | 9 | |
| 002 | 6 | 3 | 0 | 2 | 1 | |
| 002 | 7 | 10 | 0 | 5 | 5 | |
| 002 | 8 | 20 | 57 | 9 | 11 | |
| 003 | 1 | 21 | 56 | 13 | 8 | |
| 003 | 2 | 18 | 26 | 9 | 9 | |
| 003 | 3 | 18 | 38 | 8 | 10 | |
| 003 | 4 | 19 | 111 | 10 | 9 | |
| 003 | 5 | 20 | 19 | 14 | 6 | |
| 003 | 6 | 18 | 66 | 10 | 8 | |
| 003 | 7 | 16 | 6 | 8 | 8 | |
| 003 | 8 | 18 | 81 | 8 | 10 | |
| 004 | 1 | 21 | 26 | 15 | 6 | |
| 004 | 2 | 18 | 47 | 11 | 7 | |
| 004 | 3 | 15 | 11 | 8 | 7 | |
| 004 | 4 | 18 | 20 | 12 | 6 | |
| 004 | 5 | 14 | 12 | 9 | 5 | |
| 004 | 6 | 16 | 31 | 9 | 7 | |
| 004 | 7 | 7 | 4 | 4 | 3 | |
| 004 | 8 | 15 | 38 | 8 | 7 | |

# *Leptocheirus plumulosus* 28 Day Assay

**STUDY NUMBER: 20201** **PROJECT: Gowanus Canal Superfund Site**

**DATE: 11/11/10** **CLIENT: HDR Engineering, Inc.**

| Sample Number | Rep | Survived | Juveniles | Females | Males | Initials |
|---|---|---|---|---|---|---|
| 005 | 1 | 19 | 14 | 11 | 8 | JTP |
| 005 | 2 | 19 | 23 | 12 | 7 | |
| 005 | 3 | 14 | 47 | 9 | 5 | |
| 005 | 4 | 20 | 11 | 10 | 10 | |
| 005 | 5 | 20 | 32 | 10 | 10 | |
| 005 | 6 | 17 | 15 | 9 | 8 | |
| 005 | 7 | 17 | 24 | 11 | 6 | |
| 005 | 8 | 19 | 5 | 12 | 7 | |
| 006 | 1 | 19 | 33 | 7 | 12 | |
| 006 | 2 | 14 | 0 | 8 | 6 | |
| 006 | 3 | 15 | 2 | 9 | 6 | |
| 006 | 4 | 12 | 6 | 8 | 4 | |
| 006 | 5 | 18 | 21 | 10 | 8 | |
| 006 | 6 | 15 | 13 | 8 | 7 | |
| 006 | 7 | 18 | 20 | 11 | 7 | |
| 006 | 8 | 19 | 18 | 13 | 6 | |
| 007 | 1 | 17 | 13 | 12 | 5 | |
| 007 | 2 | 18 | 11 | 11 | 7 | |
| 007 | 3 | 16 | 4 | 10 | 6 | |
| 007 | 4 | 14 | 19 | 7 | 7 | |
| 007 | 5 | 15 | 0 | 12 | 3 | |
| 007 | 6 | 18 | 6 | 11 | 7 | |
| 007 | 7 | 15 | 12 | 10 | 5 | |
| 007 | 8 | 14 | 0 | 10 | 4 | |
| 008 | 1 | 15 | 2 | 8 | 7 | |
| 008 | 2 | 15 | 14 | 9 | 6 | |
| 008 | 3 | 17 | 7 | 9 | 8 | |
| 008 | 4 | 18 | 8 | 10 | 8 | |
| 008 | 5 | 16 | 21 | 11 | 5 | |
| 008 | 6 | 18 | 13 | 13 | 5 | |
| 008 | 7 | 19 | 15 | 13 | 6 | |
| 008 | 8 | 20 | 3 | 14 | 6 | |
| 009 | 1 | 1 | 0 | 1 | 0 | DM |
| 009 | 2 | 0 | - | - | - | |
| 009 | 3 | | - | - | - | |
| 009 | 4 | | - | - | - | |
| 009 | 5 | | - | - | - | |
| 009 | 6 | | - | - | - | |
| 009 | 7 | | - | - | - | |
| 009 | 8 | | - | - | - | |

# *Leptocheirus plumulosus* 28 Day Assay

**STUDY NUMBER: 20201** **PROJECT: Gowanus Canal Superfund Site**

**DATE: 11/11/10** **CLIENT: HDR Engineering, Inc.**

| Sample Number | Rep | Survived | Juveniles | Females | Males | Initials |
|---|---|---|---|---|---|---|
| 010 | 1 | 0 | - | - | - | JTP |
| 010 | 2 | 0 | - | - | - | |
| 010 | 3 | 0 | - | - | - | |
| 010 | 4 | 0 | - | - | - | |
| 010 | 5 | 0 | - | - | - | |
| 010 | 6 | 0 | - | - | - | |
| 010 | 7 | 0 | - | - | - | |
| 010 | 8 | 0 | - | - | - | |
| 011 | 1 | 0 | - | - | - | |
| 011 | 2 | 0 | - | - | - | |
| 011 | 3 | 0 | - | - | - | |
| 011 | 4 | 0 | - | - | - | |
| 011 | 5 | 0 | - | - | - | |
| 011 | 6 | 0 | - | - | - | |
| 011 | 7 | 0 | - | - | - | |
| 011 | 8 | 0 | - | - | - | |
| 012 | 1 | 16 | 17 | 9 | 7 | |
| 012 | 2 | 16 | 20 | 10 | 6 | |
| 012 | 3 | 13 | 26 | 7 | 6 | |
| 012 | 4 | 1 | 0 | 1 | 0 | |
| 012 | 5 | 20 | 29 | 11 | 9 | |
| 012 | 6 | 13 | 16 | 10 | 3 | |
| 012 | 7 | 14 | 24 | 7 | 7 | |
| 012 | 8 | 19 | 28 | 12 | 7 | |
| 013 | 1 | 19 | 16 | 13 | 6 | |
| 013 | 2 | 13 | 1 | 7 | 6 | |
| 013 | 3 | 17 | 4 | 10 | 7 | |
| 013 | 4 | 18 | 0 | 12 | 6 | |
| 013 | 5 | 16 | 5 | 11 | 5 | |
| 013 | 6 | 18 | 15 | 9 | 9 | |
| 013 | 7 | 17 | 12 | 10 | 7 | |
| 013 | 8 | 19 | 21 | 11 | 8 | |
| 014 | 1 | 3 | 0 | 1 | 2 | |
| 014 | 2 | 14 | 0 | 10 | 4 | |
| 014 | 3 | 16 | 9 | 12 | 4 | |
| 014 | 4 | 18 | 4 | 14 | 4 | |
| 014 | 5 | 17 | 0 | 11 | 6 | |
| 014 | 6 | 13 | 6 | 11 | 2 | |
| 014 | 7 | 15 | 13 | 9 | 6 | |
| 014 | 8 | 14 | 7 | 10 | 4 | |

# *Leptocheirus plumulosus* 28 Day Assay

**STUDY NUMBER:** 20201 **PROJECT:** Gowanus Canal Superfund Site

**DATE:** 11/11/10 **CLIENT:** HDR Engineering, Inc.

| Sample Number | Rep | Survived | Juveniles | Females | Males | Initials |
|---|---|---|---|---|---|---|
| 015 | 1 | 9 | 0 | 4 | 5 | JTP |
| 015 | 2 | 17 | 0 | 10 | 7 | |
| 015 | 3 | 11 | 0 | 8 | 3 | |
| 015 | 4 | 5 | 0 | 3 | 2 | |
| 015 | 5 | 15 | 0 | 10 | 5 | |
| 015 | 6 | 8 | 0 | 8 | 0 | |
| 015 | 7 | 9 | 0 | 7 | 2 | |
| 015 | 8 | 12 | 0 | 9 | 3 | |
| 016 | 1 | 9 | 0 | 6 | 3 | |
| 016 | 2 | 11 | 0 | 8 | 3 | |
| 016 | 3 | 10 | 0 | 6 | 4 | |
| 016 | 4 | 8 | 0 | 4 | 4 | |
| 016 | 5 | 4 | 0 | 3 | 1 | |
| 016 | 6 | 1 | 0 | 1 | 0 | |
| 016 | 7 | 8 | 0 | 5 | 3 | |
| 016 | 8 | 6 | 0 | 3 | 3 | |
| 017 | 1 | 13 | 0 | 8 | 5 | DM |
| 017 | 2 | 11 | 0 | 6 | 5 | |
| 017 | 3 | 11 | 0 | 9 | 2 | |
| 017 | 4 | 0 | - | - | - | |
| 017 | 5 | 3 | 0 | 2 | 1 | |
| 017 | 6 | 0 | - | - | - | |
| 017 | 7 | 2 | 0 | 2 | 0 | |
| 017 | 8 | 4 | 0 | 3 | 1 | |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| Sample Code | Sample ID | Sample Date | Receive Date | Sample Age | Client Name | Project |
|---|---|---|---|---|---|---|
| 19830-000 | 14-3755-5415 | 25 Jun-10 12:00 | 25 Jun-10 12:00 | 111d 0h | HDR Engineering, Inc. | Ecological Risk Asse |
| 19830-003 | 01-9996-7487 | 17 Jun-10 13:38 | 19 Jun-10 13:00 | 118d 22h | | |
| 19830-008 | 03-2283-8752 | 18 Jun-10 09:48 | 19 Jun-10 13:00 | 118d 2h | | |
| 19830-009 | 12-1069-2908 | 18 Jun-10 12:52 | 19 Jun-10 13:00 | 117d 23h | | |
| 19830-010 | 00-6363-3797 | 18 Jun-10 11:21 | 19 Jun-10 13:00 | 118d 1h | | |
| 19830-012 | 01-9941-3387 | 18 Jun-10 15:16 | 19 Jun-10 13:00 | 117d 21h | | |
| 19830-001 | 10-6412-9845 | 17 Jun-10 14:25 | 19 Jun-10 13:00 | 118d 22h | | |
| 19830-002 | 14-2377-4629 | 17 Jun-10 16:50 | 19 Jun-10 13:00 | 118d 19h | | |
| 19830-004 | 02-9429-9959 | 18 Jun-10 10:15 | 19 Jun-10 13:00 | 118d 2h | | |
| 19830-005 | 09-3345-3845 | 18 Jun-10 10:30 | 19 Jun-10 13:00 | 118d 2h | | |
| 19830-006 | 05-3627-1272 | 18 Jun-10 13:15 | 19 Jun-10 13:00 | 117d 23h | | |
| 19830-007 | 20-4940-8825 | 18 Jun-10 12:40 | 19 Jun-10 13:00 | 117d 23h | | |
| 19830-011 | 15-0121-6600 | 18 Jun-10 15:55 | 19 Jun-10 13:00 | 117d 20h | | |
| 19830-013 | 12-2297-1777 | 21 Jun-10 12:50 | 22 Jun-10 15:00 | 114d 23h | | |
| 19830-014 | 07-7862-4227 | 21 Jun-10 14:05 | 22 Jun-10 15:00 | 114d 22h | | |
| 19830-015 | 19-3475-1966 | 22 Jun-10 10:40 | 23 Jun-10 09:30 | 114d 1h | | |
| 19830-016 | 00-4606-7422 | 22 Jun-10 14:35 | 23 Jun-10 09:30 | 113d 21h | | |
| 19830-017 | 19-8907-5507 | 24 Jun-10 09:50 | 25 Jun-10 09:30 | 112d 2h | | |

| Sample Code | Material Type | Sample Source | Station Location | Latitude | Longitude |
|---|---|---|---|---|---|
| 19830-000 | Marine Sediment | Gowanus Canal Superfund Site | Laboratory Control; 19830-000 | | |
| 19830-003 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD326-0.0-0.5; 19830-003 | | |
| 19830-008 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD328-0.0-0.5; 19830-008 | | |
| 19830-009 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD330-0.0-0.5; 19830-009 | | |
| 19830-010 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD333-0.0-0.5; 19830-010 | | |
| 19830-012 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD329-0.0-0.5; 19830-012 | | |
| 19830-001 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD303-0.0-0.5; 19830-001 | | |
| 19830-002 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD307A-0.0-0.5; 19830-002 | | |
| 19830-004 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD309-0.0-0.5; 19830-004 | | |
| 19830-005 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD313-0.0-0.5; 19830-005 | | |
| 19830-006 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD314-0.0-0.5; 19830-006 | | |
| 19830-007 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD315-0.0-0.5; 19830-007 | | |
| 19830-011 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD307B-0.0-0.5; 19830-011 | | |
| 19830-013 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD324-0.0-0.5; 19830-013 | | |
| 19830-014 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD321-0.0-0.5; 19830-014 | | |
| 19830-015 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD319-0.0-0.5; 19830-015 | | |
| 19830-016 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD318-0.0-0.5; 19830-016 | | |
| 19830-017 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD310-0.0-0.5; 19830-017 | | |

| Sample Code | vs | Sample Code | P-Value | Alpha | Decision | Analysis ID | Method |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 0.0003 | 0.05 | Significant Effect | 13-6489-0745 | Equal Variance t Two-Sample Test |
| | | 19830-003 | <0.0001 | 0.05 | Significant Effect | 11-2101-6111 | Equal Variance t Two-Sample Test |
| | | 19830-003 | 0.4740 | 0.05 | Non-Significant Effect | 20-0285-7907 | Equal Variance t Two-Sample Test |

**Test Acceptability**

| Analysis ID | Endpoint | Attribute | Test Stat | TAC Limits | Overlap | Decision |
|---|---|---|---|---|---|---|
| 20-0285-7907 | Proportion Survived | Control Resp | 0.8125 | 0.8 - NL | Yes | Passes Acceptibility Criteria |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** **EnviroSystems, Inc.**

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9514 | 1.164 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-003 | 8 | 0.4752 | 0.3853 | 0.5652 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 55.06% |
| 19830-008 | 8 | 0.7972 | 0.6622 | 0.9322 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 24.62% |
| 19830-009 | 8 | 1.096 | 1.026 | 1.166 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | -3.67% |
| 19830-010 | 8 | 0.6734 | 0.5761 | 0.7707 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 36.32% |
| 19830-012 | 8 | 0.7908 | 0.7267 | 0.8549 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 25.22% |
| 19830-001 | 8 | 0.8858 | 0.7849 | 0.9866 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | 16.25% |
| 19830-002 | 8 | 0.5755 | 0.5136 | 0.6374 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 45.58% |
| 19830-004 | 8 | 0.6434 | 0.566 | 0.7208 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | 39.16% |
| 19830-005 | 8 | 0.00275 | -0.000154 | 0.005654 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.74% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-011 | 8 | 0.6449 | 0.5379 | 0.7519 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | 39.02% |
| 19830-013 | 8 | 0.6661 | 0.5945 | 0.7377 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 37.02% |
| 19830-014 | 8 | 0.4183 | 0.3511 | 0.4855 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 60.45% |
| 19830-015 | 8 | 0.1751 | 0.1436 | 0.2065 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 83.45% |
| 19830-016 | 8 | 0.1047 | 0.08046 | 0.129 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 90.1% |
| 19830-017 | 8 | 0.1297 | 0.07101 | 0.1884 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 87.74% |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.196 | 1.387 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-003 | 7 | 0.6678 | 0.6175 | 0.7181 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 48.3% |
| 19830-008 | 8 | 1.011 | 0.8949 | 1.126 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 21.76% |
| 19830-009 | 8 | 1.193 | 1.121 | 1.266 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 7.63% |
| 19830-010 | 8 | 0.8495 | 0.7667 | 0.9323 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 34.24% |
| 19830-012 | 8 | 0.8768 | 0.8096 | 0.9439 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 32.13% |
| 19830-001 | 8 | 1.072 | 0.9885 | 1.156 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | 16.99% |
| 19830-002 | 8 | 0.7245 | 0.6466 | 0.8024 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | 43.91% |
| 19830-004 | 8 | 0.7462 | 0.6577 | 0.8346 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | 42.24% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 65.94% |
| 19830-011 | 8 | 0.8609 | 0.772 | 0.9498 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | 33.35% |
| 19830-013 | 8 | 0.7676 | 0.7093 | 0.8259 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | 40.58% |
| 19830-014 | 8 | 0.5834 | 0.5263 | 0.6404 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 54.84% |
| 19830-015 | 8 | 0.3157 | 0.2847 | 0.3467 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 75.56% |
| 19830-016 | 8 | 0.2971 | 0.2568 | 0.3374 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 77.0% |
| 19830-017 | 6 | 0.4144 | 0.3461 | 0.4828 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 67.92% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** **EnviroSystems, Inc.**

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7681 | 0.8569 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-003 | 8 | 0.7063 | 0.5884 | 0.8241 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 13.08% |
| 19830-008 | 8 | 0.75 | 0.6434 | 0.8566 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 7.69% |
| 19830-009 | 8 | 0.9188 | 0.8944 | 0.9431 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | -13.08% |
| 19830-010 | 8 | 0.7687 | 0.6955 | 0.842 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 5.39% |
| 19830-012 | 8 | 0.9062 | 0.8683 | 0.9442 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -11.54% |
| 19830-001 | 8 | 0.8125 | 0.7639 | 0.8611 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | 0.0% |
| 19830-002 | 8 | 0.7938 | 0.7631 | 0.8244 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | 2.31% |
| 19830-004 | 8 | 0.8625 | 0.8283 | 0.8967 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -6.15% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01285 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.23% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-011 | 8 | 0.7 | 0.5907 | 0.8093 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 13.85% |
| 19830-013 | 8 | 0.8563 | 0.8197 | 0.8928 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -5.39% |
| 19830-014 | 8 | 0.6875 | 0.6006 | 0.7744 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 15.38% |
| 19830-015 | 8 | 0.5375 | 0.465 | 0.61 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 33.85% |
| 19830-016 | 8 | 0.3562 | 0.2944 | 0.4181 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 56.15% |
| 19830-017 | 8 | 0.275 | 0.1757 | 0.3743 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 66.15% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** **EnviroSystems, Inc.**

**Mean Dry Biomass-mg Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 0.565 | 1.101 | 1.321 | 1.36 | 0.9 | 1.362 | 0.992 | 0.8595 |
| 19830-003 | 0.612 | 0.4845 | 0.4865 | 0.7155 | 0.4675 | 0.7415 | 0.2945 | 0 |
| 19830-008 | 1.157 | 1.09 | 0.8435 | 0.6675 | 0.8545 | 0.0685 | 0.582 | 1.115 |
| 19830-009 | 0.9857 | 1.114 | 1.185 | 1.332 | 1.015 | 1.237 | 0.7255 | 1.176 |
| 19830-010 | 0.8129 | 0.9315 | 0.737 | 0.861 | 0.438 | 0.543 | 0.1875 | 0.8765 |
| 19830-012 | 1.126 | 0.791 | 0.7035 | 0.8065 | 0.8705 | 0.839 | 0.603 | 0.5865 |
| 19830-001 | 1.091 | 0.4715 | 0.749 | 0.5175 | 1.171 | 1.018 | 1.025 | 1.044 |
| 19830-002 | 0.7315 | 0.686 | 0.5305 | 0.7895 | 0.3295 | 0.64 | 0.522 | 0.375 |
| 19830-004 | 0.3575 | 0.565 | 0.61 | 0.57 | 0.957 | 0.4965 | 0.937 | 0.654 |
| 19830-005 | 0.022 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-007 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-011 | 0.692 | 0.712 | 0.6695 | 0.018 | 1.018 | 0.55 | 0.797 | 0.7025 |
| 19830-013 | 0.8125 | 0.398 | 0.486 | 0.6095 | 0.583 | 0.8455 | 0.631 | 0.963 |
| 19830-014 | 0.053 | 0.3245 | 0.5395 | 0.5705 | 0.388 | 0.3995 | 0.63 | 0.4415 |
| 19830-015 | 0.207 | 0.303 | 0.157 | 0.0625 | 0.236 | 0.0865 | 0.112 | 0.2365 |
| 19830-016 | 0.2015 | 0.1725 | 0.1305 | 0.1215 | 0.034 | 0.0225 | 0.105 | 0.0505 |
| 19830-017 | 0.3585 | 0.3855 | 0.1485 | 0 | 0.031 | 0 | 0.0375 | 0.0765 |

**Mean Dry Weight-mg Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 0.8071 | 1.469 | 1.321 | 1.431 | 1.059 | 1.603 | 1.417 | 1.228 |
| 19830-003 | 0.6442 | 0.6056 | 0.695 | 0.8944 | 0.5194 | 0.7805 | 0.5355 | |
| 19830-008 | 1.446 | 1.282 | 0.9372 | 0.7853 | 0.8995 | 0.4567 | 1.164 | 1.115 |
| 19830-009 | 0.9857 | 1.238 | 1.316 | 1.403 | 1.015 | 1.375 | 0.9069 | 1.307 |
| 19830-010 | 0.8129 | 1.035 | 0.9827 | 0.9567 | 0.6257 | 0.6788 | 0.5357 | 1.169 |
| 19830-012 | 1.186 | 0.8326 | 1.005 | 0.8065 | 0.8705 | 0.9871 | 0.7094 | 0.6174 |
| 19830-001 | 1.148 | 0.6736 | 0.9987 | 0.8625 | 1.301 | 1.357 | 1.138 | 1.099 |
| 19830-002 | 0.8606 | 0.7622 | 0.6631 | 1.128 | 0.4393 | 0.7111 | 0.696 | 0.5357 |
| 19830-004 | 0.4767 | 0.7533 | 0.7176 | 0.6333 | 1.196 | 0.5517 | 0.9863 | 0.654 |
| 19830-005 | 0.44 | | | | | | | |
| 19830-011 | 0.865 | 0.89 | 1.03 | 0.36 | 1.018 | 0.8462 | 1.139 | 0.7395 |
| 19830-013 | 0.8553 | 0.6123 | 0.5718 | 0.6772 | 0.7288 | 0.9394 | 0.7424 | 1.014 |
| 19830-014 | 0.3533 | 0.4636 | 0.6744 | 0.6339 | 0.4565 | 0.6146 | 0.84 | 0.6307 |
| 19830-015 | 0.46 | 0.3565 | 0.2855 | 0.25 | 0.3147 | 0.2162 | 0.2489 | 0.3942 |
| 19830-016 | 0.4478 | 0.3136 | 0.261 | 0.3038 | 0.17 | 0.45 | 0.2625 | 0.1683 |
| 19830-017 | 0.5515 | 0.7009 | 0.27 | 0.2067 | 0.375 | 0.3825 | | |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** **EnviroSystems, Inc.**

**Proportion Survived Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 0.7 | 0.75 | 1 | 0.95 | 0.85 | 0.85 | 0.7 | 0.7 |
| 19830-003 | 0.95 | 0.8 | 0.7 | 0.8 | 0.9 | 0.95 | 0.55 | 0 |
| 19830-008 | 0.8 | 0.85 | 0.9 | 0.85 | 0.95 | 0.15 | 0.5 | 1 |
| 19830-009 | 1 | 0.9 | 0.9 | 0.95 | 1 | 0.9 | 0.8 | 0.9 |
| 19830-010 | 1 | 0.9 | 0.75 | 0.9 | 0.7 | 0.8 | 0.35 | 0.75 |
| 19830-012 | 0.95 | 0.95 | 0.7 | 1 | 1 | 0.85 | 0.85 | 0.95 |
| 19830-001 | 0.95 | 0.7 | 0.75 | 0.6 | 0.9 | 0.75 | 0.9 | 0.95 |
| 19830-002 | 0.85 | 0.9 | 0.8 | 0.7 | 0.75 | 0.9 | 0.75 | 0.7 |
| 19830-004 | 0.75 | 0.75 | 0.85 | 0.9 | 0.8 | 0.9 | 0.95 | 1 |
| 19830-005 | 0.05 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-007 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-011 | 0.8 | 0.8 | 0.65 | 0.05 | 1 | 0.65 | 0.7 | 0.95 |
| 19830-013 | 0.95 | 0.65 | 0.85 | 0.9 | 0.8 | 0.9 | 0.85 | 0.95 |
| 19830-014 | 0.15 | 0.7 | 0.8 | 0.9 | 0.85 | 0.65 | 0.75 | 0.7 |
| 19830-015 | 0.45 | 0.85 | 0.55 | 0.25 | 0.75 | 0.4 | 0.45 | 0.6 |
| 19830-016 | 0.45 | 0.55 | 0.5 | 0.4 | 0.2 | 0.05 | 0.4 | 0.3 |
| 19830-017 | 0.65 | 0.55 | 0.55 | 0 | 0.15 | 0 | 0.1 | 0.2 |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| Sample Code | Sample ID | Sample Date | Receive Date | Sample Age | Client Name | Project |
|---|---|---|---|---|---|---|
| 19830-000 | 14-3755-5415 | 25 Jun-10 12:00 | 25 Jun-10 12:00 | 111d 0h | HDR Engineering, Inc. | Ecological Risk Asse |
| 19830-003 | 01-9996-7487 | 17 Jun-10 13:38 | 19 Jun-10 13:00 | 118d 22h | | |
| 19830-008 | 03-2283-8752 | 18 Jun-10 09:48 | 19 Jun-10 13:00 | 118d 2h | | |
| 19830-009 | 12-1069-2908 | 18 Jun-10 12:52 | 19 Jun-10 13:00 | 117d 23h | | |
| 19830-010 | 00-6363-3797 | 18 Jun-10 11:21 | 19 Jun-10 13:00 | 118d 1h | | |
| 19830-012 | 01-9941-3387 | 18 Jun-10 15:16 | 19 Jun-10 13:00 | 117d 21h | | |
| 19830-001 | 10-6412-9845 | 17 Jun-10 14:25 | 19 Jun-10 13:00 | 118d 22h | | |
| 19830-002 | 14-2377-4629 | 17 Jun-10 16:50 | 19 Jun-10 13:00 | 118d 19h | | |
| 19830-004 | 02-9429-9959 | 18 Jun-10 10:15 | 19 Jun-10 13:00 | 118d 2h | | |
| 19830-005 | 09-3345-3845 | 18 Jun-10 10:30 | 19 Jun-10 13:00 | 118d 2h | | |
| 19830-006 | 05-3627-1272 | 18 Jun-10 13:15 | 19 Jun-10 13:00 | 117d 23h | | |
| 19830-007 | 20-4940-8825 | 18 Jun-10 12:40 | 19 Jun-10 13:00 | 117d 23h | | |
| 19830-011 | 15-0121-6600 | 18 Jun-10 15:55 | 19 Jun-10 13:00 | 117d 20h | | |
| 19830-013 | 12-2297-1777 | 21 Jun-10 12:50 | 22 Jun-10 15:00 | 114d 23h | | |
| 19830-014 | 07-7862-4227 | 21 Jun-10 14:05 | 22 Jun-10 15:00 | 114d 22h | | |
| 19830-015 | 19-3475-1966 | 22 Jun-10 10:40 | 23 Jun-10 09:30 | 114d 1h | | |
| 19830-016 | 00-4606-7422 | 22 Jun-10 14:35 | 23 Jun-10 09:30 | 113d 21h | | |
| 19830-017 | 19-8907-5507 | 24 Jun-10 09:50 | 25 Jun-10 09:30 | 112d 2h | | |

| Sample Code | Material Type | Sample Source | Station Location | Latitude | Longitude |
|---|---|---|---|---|---|
| 19830-000 | Marine Sediment | Gowanus Canal Superfund Site | Laboratory Control; 19830-000 | | |
| 19830-003 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD326-0.0-0.5; 19830-003 | | |
| 19830-008 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD328-0.0-0.5; 19830-008 | | |
| 19830-009 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD330-0.0-0.5; 19830-009 | | |
| 19830-010 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD333-0.0-0.5; 19830-010 | | |
| 19830-012 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD329-0.0-0.5; 19830-012 | | |
| 19830-001 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD303-0.0-0.5; 19830-001 | | |
| 19830-002 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD307A-0.0-0.5; 19830-002 | | |
| 19830-004 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD309-0.0-0.5; 19830-004 | | |
| 19830-005 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD313-0.0-0.5; 19830-005 | | |
| 19830-006 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD314-0.0-0.5; 19830-006 | | |
| 19830-007 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD315-0.0-0.5; 19830-007 | | |
| 19830-011 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD307B-0.0-0.5; 19830-011 | | |
| 19830-013 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD324-0.0-0.5; 19830-013 | | |
| 19830-014 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD321-0.0-0.5; 19830-014 | | |
| 19830-015 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD319-0.0-0.5; 19830-015 | | |
| 19830-016 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD318-0.0-0.5; 19830-016 | | |
| 19830-017 | Marine Sediment | Gowanus Canal Superfund Site | GC-SD310-0.0-0.5; 19830-017 | | |

| Sample Code | vs | Sample Code | P-Value | Alpha | Decision | Analysis ID | Method |
|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 0.1869 | 0.05 | Non-Significant Effect | 10-9955-5793 | Equal Variance t Two-Sample Test |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.79 | 5.928 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-003 | 7 | 0.5079 | 0.3121 | 0.7037 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 89.55% |
| 19830-008 | 8 | 3.556 | 2.506 | 4.605 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 26.82% |
| 19830-009 | 8 | 5.235 | 3.81 | 6.66 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | -7.73% |
| 19830-010 | 8 | 2.447 | 1.896 | 2.998 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 49.64% |
| 19830-012 | 8 | 2.122 | 1.563 | 2.681 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 56.33% |
| 19830-001 | 8 | 1.577 | 1.026 | 2.127 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | 67.55% |
| 19830-002 | 8 | 0.8679 | 0.5395 | 1.196 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 82.14% |
| 19830-004 | 8 | 0.9576 | 0.7383 | 1.177 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 80.29% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-011 | 8 | 2.2 | 1.769 | 2.632 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | 54.72% |
| 19830-013 | 8 | 0.8755 | 0.6065 | 1.144 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 81.98% |
| 19830-014 | 8 | 0.4657 | 0.2772 | 0.6542 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 90.42% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Offspring/Surviving Female Detail**

| Sample Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | 0.5714 | 10 | 5.375 | 3.857 | 2 | 5 | 6.444 | 5.625 |
| 19830-003 | 0.3636 | 0.4444 | 0.9 | 1.5 | 0 | 0.125 | 0.2222 | |
| 19830-008 | 6.429 | 6.111 | 5.273 | 1.6 | 2.7 | 0 | 0 | 6.333 |
| 19830-009 | 4.308 | 2.889 | 4.75 | 11.1 | 1.357 | 6.6 | 0.75 | 10.13 |
| 19830-010 | 1.733 | 4.273 | 1.375 | 1.667 | 1.333 | 3.444 | 1 | 4.75 |
| 19830-012 | 1.273 | 1.917 | 5.222 | 1.1 | 3.2 | 1.667 | 2.182 | 0.4167 |
| 19830-001 | 4.714 | 0 | 0.2222 | 0.75 | 2.1 | 1.625 | 1.818 | 1.385 |
| 19830-002 | 1.083 | 1 | 0.4 | 2.714 | 0 | 0.5455 | 1.2 | 0 |
| 19830-004 | 0.25 | 1.556 | 0.7778 | 0.8 | 1.909 | 1 | 1.154 | 0.2143 |
| 19830-005 | 0 | | | | | | | |
| 19830-011 | 1.889 | 2 | 3.714 | 0 | 2.636 | 1.6 | 3.429 | 2.333 |
| 19830-013 | 1.231 | 0.1429 | 0.4 | 0 | 0.4545 | 1.667 | 1.2 | 1.909 |
| 19830-014 | 0 | 0 | 0.75 | 0.2857 | 0 | 0.5455 | 1.444 | 0.7 |
| 19830-015 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-016 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19830-017 | 0 | 0 | 0 | 0 | 0 | 0 | | |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-4822-6263 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 18.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | 1.909 | 1.761 | 14 | 0.2515 | 0.0385 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.858 | 2.586 | 0.0096 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2970845 | 0.2970845 | 1 | 3.644 | 0.0770 | Non-Significant Effect |
| Error | 1.141435 | 0.08153107 | 14 | | | |
| Total | 1.438519 | 0.3786156 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.249 | 8.885 | 0.0439 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8824 | 0.8408 | 0.0424 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-011 | 8 | 0.7 | 0.5886 | 0.8114 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 22.76% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-4351-1630 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | 1.696 | 1.771 | 13 | 0.1669 | 0.0568 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.09546966 | 0.09546966 | 1 | 2.878 | 0.1136 | Non-Significant Effect |
| Error | 0.4312463 | 0.03317279 | 13 | | | |
| Total | 0.5267159 | 0.1286425 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.588 | 9.155 | 0.5573 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9726 | 0.8328 | 0.8943 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-011 | 7 | 0.7929 | 0.7397 | 0.846 | 0.65 | 1 | 0.05281 | 0.1397 | 17.62% | 12.51% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-0898-1467 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 7.61% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 1.197 | 1.761 | 14 | 0.1307 | 0.1255 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.058 | 2.586 | 0.4427 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03159259 | 0.03159259 | 1 | 1.434 | 0.2510 | Non-Significant Effect |
| Error | 0.3084812 | 0.02203437 | 14 | | | |
| Total | 0.3400738 | 0.05362696 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.452 | 8.885 | 0.6351 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9106 | 0.8408 | 0.1189 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | 5.52% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-1525-6644 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 2.772 | 1.761 | 14 | 0.1903 | 0.0075 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.822 | 2.586 | 0.0123 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3589419 | 0.3589419 | 1 | 7.687 | 0.0150 | Significant Effect |
| Error | 0.6537554 | 0.04669682 | 14 | | | |
| Total | 1.012697 | 0.4056388 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.579 | 8.885 | 0.2345 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8597 | 0.8408 | 0.0190 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 24.14% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-4714-5015 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 7.46% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 2.959 | 1.771 | 13 | 0.1289 | 0.0055 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.173223 | 0.173223 | 1 | 8.757 | 0.0111 | Significant Effect |
| Error | 0.2571647 | 0.0197819 | 13 | | | |
| Total | 0.4303878 | 0.1930049 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.101 | 10.79 | 0.3843 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9377 | 0.8328 | 0.3546 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-014 | 7 | 0.7643 | 0.7301 | 0.7985 | 0.65 | 0.9 | 0.03401 | 0.08997 | 11.77% | 15.67% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-2241-2851 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 4.936 | 1.761 | 14 | 0.1637 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.924 | 2.586 | 0.6734 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8417678 | 0.8417678 | 1 | 24.37 | 0.0002 | Significant Effect |
| Error | 0.4835983 | 0.03454273 | 14 | | | |
| Total | 1.325366 | 0.8763105 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.648 | 8.885 | 0.5259 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.964 | 0.8408 | 0.7346 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 40.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2131-6485 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 7.307 | 1.761 | 14 | 0.1596 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.278 | 2.586 | 0.2010 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.753163 | 1.753163 | 1 | 53.4 | <0.0001 | Significant Effect |
| Error | 0.4596705 | 0.03283361 | 14 | | | |
| Total | 2.212834 | 1.785997 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.517 | 8.885 | 0.5963 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8981 | 0.8408 | 0.0750 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 60.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-3167-5987 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 16.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 6.041 | 1.761 | 14 | 0.2287 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.737 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.460847 | 2.460847 | 1 | 36.5 | <0.0001 | Significant Effect |
| Error | 0.9439347 | 0.06742391 | 14 | | | |
| Total | 3.404782 | 2.528271 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.168 | 8.885 | 0.0792 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9613 | 0.8408 | 0.6854 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-017 | 8 | 0.275 | 0.1738 | 0.3762 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 69.66% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-2319-6690 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.02% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | 1.684 | 1.761 | 14 | 0.1478 | 0.0572 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.82 | 2.586 | 0.9060 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.07986705 | 0.07986705 | 1 | 2.835 | 0.1144 | Non-Significant Effect |
| Error | 0.3943775 | 0.02816982 | 14 | | | |
| Total | 0.4742445 | 0.1080369 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.159 | 8.885 | 0.8506 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9138 | 0.8408 | 0.1338 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | 10.34% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-7951-6753 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 6.77% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 2.627 | 1.761 | 14 | 0.1203 | 0.0100 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.236 | 2.586 | 0.2363 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.128822 | 0.128822 | 1 | 6.9 | 0.0199 | Significant Effect |
| Error | 0.2613752 | 0.01866966 | 14 | | | |
| Total | 0.3901972 | 0.1474916 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.321 | 8.885 | 0.2892 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9255 | 0.8408 | 0.2068 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | 12.41% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-6292-5050 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 7.99% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 0.9984 | 1.761 | 14 | 0.1354 | 0.1675 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.988 | 2.586 | 0.5552 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02355785 | 0.02355785 | 1 | 0.9969 | 0.3350 | Non-Significant Effect |
| Error | 0.3308401 | 0.02363144 | 14 | | | |
| Total | 0.354398 | 0.04718929 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.233 | 8.885 | 0.7896 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9643 | 0.8408 | 0.7401 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | 4.83% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7274-2660 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 6.07% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 19.71 | 1.895 | 7 | 0.1115 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.596 | 2.586 | 0.0473 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.38349 | 5.38349 | 1 | 388.6 | <0.0001 | Significant Effect |
| Error | 0.1939276 | 0.01385197 | 14 | | | |
| Total | 5.577418 | 5.397342 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 16.21 | 8.885 | 0.0016 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8928 | 0.8408 | 0.0617 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.31% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-3573-5834 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 3.73% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 27.27 | 1.771 | 13 | 0.07808 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.396506 | 5.396506 | 1 | 743.6 | <0.0001 | Significant Effect |
| Error | 0.09434704 | 0.007257465 | 13 | | | |
| Total | 5.490853 | 5.403764 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.603 | 9.155 | 0.0120 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8467 | 0.8328 | 0.0156 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9357 | 0.9119 | 0.9596 | 0.85 | 1 | 0.02369 | 0.06268 | 6.7% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-9672-4068 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 5.22% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | 20.56 | 1.761 | 14 | 0.1006 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.675 | 2.586 | 0.0307 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.51594 | 5.51594 | 1 | 422.8 | <0.0001 | Significant Effect |
| Error | 0.1826604 | 0.01304718 | 14 | | | |
| Total | 5.698601 | 5.528987 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.248 | 8.862 | 0.0175 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8489 | 0.8408 | 0.0131 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0197-1471 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 3.42% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.524592 | 5.524592 | 1 | 864.5 | <0.0001 | Significant Effect |
| Error | 0.08307989 | 0.006390761 | 13 | | | |
| Total | 5.607672 | 5.530983 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.17 | 9.33 | 0.0045 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7598 | 0.8328 | 0.0012 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9357 | 0.9119 | 0.9596 | 0.85 | 1 | 0.02369 | 0.06268 | 6.7% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-1530-9598 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 5.22% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 20.56 | 1.761 | 14 | 0.1006 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.675 | 2.586 | 0.0307 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.51594 | 5.51594 | 1 | 422.8 | <0.0001 | Significant Effect |
| Error | 0.1826604 | 0.01304718 | 14 | | | |
| Total | 5.698601 | 5.528987 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.248 | 8.862 | 0.0175 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8489 | 0.8408 | 0.0131 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-0575-0084 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 3.42% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.524592 | 5.524592 | 1 | 864.5 | <0.0001 | Significant Effect |
| Error | 0.08307989 | 0.006390761 | 13 | | | |
| Total | 5.607672 | 5.530983 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.17 | 9.33 | 0.0045 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7598 | 0.8328 | 0.0012 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9357 | 0.9119 | 0.9596 | 0.85 | 1 | 0.02369 | 0.06268 | 6.7% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-0955-0066 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 20.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 2.4 | 1.761 | 14 | 0.1985 | 0.0154 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.136 | 2.586 | 0.3408 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2928198 | 0.2928198 | 1 | 5.762 | 0.0308 | Significant Effect |
| Error | 0.7115152 | 0.05082252 | 14 | | | |
| Total | 1.004335 | 0.3436424 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.364 | 8.885 | 0.6922 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9661 | 0.8408 | 0.7715 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 30.08% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-6220-7061 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 19.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 4.276 | 1.761 | 14 | 0.1952 | 0.0004 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.172 | 2.586 | 0.2990 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8981732 | 0.8981732 | 1 | 18.29 | 0.0008 | Significant Effect |
| Error | 0.6875875 | 0.04911339 | 14 | | | |
| Total | 1.585761 | 0.9472865 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.482 | 8.885 | 0.6165 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9389 | 0.8408 | 0.3362 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 53.66% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2353-6993 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 27.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 4.121 | 1.761 | 14 | 0.2548 | 0.0005 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.664 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.421718 | 1.421718 | 1 | 16.99 | 0.0010 | Significant Effect |
| Error | 1.171852 | 0.0837037 | 14 | | | |
| Total | 2.59357 | 1.505422 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.854 | 8.885 | 0.4340 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9444 | 0.8408 | 0.4063 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-017 | 8 | 0.275 | 0.1738 | 0.3762 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 64.23% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-0185-8983 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 23.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 0.8877 | 1.761 | 14 | 0.221 | 0.1949 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.43 | 2.586 | 0.1063 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04962508 | 0.04962508 | 1 | 0.788 | 0.3897 | Non-Significant Effect |
| Error | 0.8816724 | 0.0629766 | 14 | | | |
| Total | 0.9312975 | 0.1126017 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.147 | 8.885 | 0.8607 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8858 | 0.8408 | 0.0479 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 10.57% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-8871-0114 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 16.24 | 1.943 | 6 | 0.1243 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.025455 | 4.025455 | 1 | 299.7 | <0.0001 | Significant Effect |
| Error | 0.1746109 | 0.01343161 | 13 | | | |
| Total | 4.200066 | 4.038887 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 16.91 | 9.155 | 0.0015 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8747 | 0.8328 | 0.0396 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.8286 | 0.7877 | 0.8694 | 0.7 | 1 | 0.04062 | 0.1075 | 12.97% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0537-6804 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 21.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | -0.2425 | 1.771 | 13 | 0.2064 | 0.5939 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.002982004 | 0.002982004 | 1 | 0.05881 | 0.8122 | Non-Significant Effect |
| Error | 0.6591633 | 0.05070487 | 13 | | | |
| Total | 0.6621453 | 0.05368687 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.416 | 10.79 | 0.6878 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9609 | 0.8328 | 0.7079 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-011 | 7 | 0.7929 | 0.7397 | 0.846 | 0.65 | 1 | 0.05281 | 0.1397 | 17.62% | -3.14% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-1609-0284 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 30.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | 0.5394 | 1.761 | 14 | 0.2754 | 0.2990 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.609 | 2.586 | 0.0442 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.028461 | 0.028461 | 1 | 0.291 | 0.5981 | Non-Significant Effect |
| Error | 1.369352 | 0.09781086 | 14 | | | |
| Total | 1.397813 | 0.1262719 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.335 | 8.885 | 0.2857 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8954 | 0.8408 | 0.0678 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-011 | 8 | 0.7 | 0.5886 | 0.8114 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 8.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-0802-3031 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 14.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.811 | 2.586 | 0.0132 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.889782 | 3.889782 | 1 | 132.6 | <0.0001 | Significant Effect |
| Error | 0.4105775 | 0.02932696 | 14 | | | |
| Total | 4.30036 | 3.919109 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.507 | 8.862 | 0.0113 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7807 | 0.8408 | 0.0015 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-5996-9064 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.88% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 16.88 | 1.943 | 6 | 0.1212 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.136183 | 4.136183 | 1 | 329.2 | <0.0001 | Significant Effect |
| Error | 0.1633437 | 0.0125649 | 13 | | | |
| Total | 4.299527 | 4.148748 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 14.76 | 9.33 | 0.0023 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8383 | 0.8328 | 0.0119 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.8286 | 0.7877 | 0.8694 | 0.7 | 1 | 0.04062 | 0.1075 | 12.97% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-1542-2004 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 14.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.811 | 2.586 | 0.0132 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.889782 | 3.889782 | 1 | 132.6 | <0.0001 | Significant Effect |
| Error | 0.4105775 | 0.02932696 | 14 | | | |
| Total | 4.30036 | 3.919109 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.507 | 8.862 | 0.0113 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7807 | 0.8408 | 0.0015 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3992-1698 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.88% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 16.88 | 1.943 | 6 | 0.1212 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.136183 | 4.136183 | 1 | 329.2 | <0.0001 | Significant Effect |
| Error | 0.1633437 | 0.0125649 | 13 | | | |
| Total | 4.299527 | 4.148748 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 14.76 | 9.33 | 0.0023 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8383 | 0.8328 | 0.0119 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.8286 | 0.7877 | 0.8694 | 0.7 | 1 | 0.04062 | 0.1075 | 12.97% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-1744-5062 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 16.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | -1.015 | 1.761 | 14 | 0.1724 | 0.8363 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.46 | 2.586 | 0.0928 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03944503 | 0.03944503 | 1 | 1.03 | 0.3275 | Non-Significant Effect |
| Error | 0.5363983 | 0.03831416 | 14 | | | |
| Total | 0.5758433 | 0.07775919 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.263 | 8.885 | 0.1414 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9382 | 0.8408 | 0.3278 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -11.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8365-0149 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 18.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | -1.828 | 1.761 | 14 | 0.1813 | 0.9556 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.339 | 2.586 | 0.1573 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1416399 | 0.1416399 | 1 | 3.343 | 0.0889 | Non-Significant Effect |
| Error | 0.5932379 | 0.04237414 | 14 | | | |
| Total | 0.7348778 | 0.184014 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.248 | 8.885 | 0.3073 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9529 | 0.8408 | 0.5366 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -17.89% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7638-0316 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 18.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | -0.4446 | 1.761 | 14 | 0.1857 | 0.6683 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.284 | 2.586 | 0.1967 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.008787782 | 0.008787782 | 1 | 0.1977 | 0.6634 | Non-Significant Effect |
| Error | 0.6222945 | 0.04444961 | 14 | | | |
| Total | 0.6310823 | 0.05323739 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.939 | 8.885 | 0.4019 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9674 | 0.8408 | 0.7952 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | -5.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-5977-8847 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 16.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | -0.09325 | 1.761 | 14 | 0.1646 | 0.5365 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.575 | 2.586 | 0.0528 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0003039089 | 0.0003039089 | 1 | 0.008696 | 0.9270 | Non-Significant Effect |
| Error | 0.4892922 | 0.03494944 | 14 | | | |
| Total | 0.4895961 | 0.03525335 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.216 | 8.885 | 0.0446 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9133 | 0.8408 | 0.1317 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | -3.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-1909-6162 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 17.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | -1.116 | 1.761 | 14 | 0.1759 | 0.8583 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.41 | 2.586 | 0.1161 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04966885 | 0.04966885 | 1 | 1.244 | 0.2834 | Non-Significant Effect |
| Error | 0.5587572 | 0.03991123 | 14 | | | |
| Total | 0.608426 | 0.08958007 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.771 | 8.885 | 0.2022 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9617 | 0.8408 | 0.6932 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -12.2% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-6963-8247 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.0% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 40.5 | | 14 | 2 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.017 | 2.586 | 0.0027 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3827269 | 0.3827269 | 1 | 9.369 | 0.0085 | Significant Effect |
| Error | 0.5718779 | 0.04084842 | 14 | | | |
| Total | 0.9546049 | 0.4235754 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.674 | 8.885 | 0.0594 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8311 | 0.8408 | 0.0073 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 25.17% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-2727-8214 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 6.22% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 3.747 | 1.771 | 13 | 0.1064 | 0.0012 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.189286 | 0.189286 | 1 | 14.04 | 0.0024 | Significant Effect |
| Error | 0.1752872 | 0.01348363 | 13 | | | |
| Total | 0.3645732 | 0.2027696 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.159 | 10.79 | 0.8729 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.93 | 0.8328 | 0.2730 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-014 | 7 | 0.7643 | 0.7301 | 0.7985 | 0.65 | 0.9 | 0.03401 | 0.08997 | 11.77% | 16.81% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5435-5546 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.57% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 5.532 | 1.761 | 14 | 0.1492 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.111 | 2.586 | 0.3707 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8779891 | 0.8779891 | 1 | 30.6 | <0.0001 | Significant Effect |
| Error | 0.4017208 | 0.02869434 | 14 | | | |
| Total | 1.27971 | 0.9066834 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.986 | 8.885 | 0.1722 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9714 | 0.8408 | 0.8614 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 41.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-1458-2384 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 8.179 | 1.761 | 14 | 0.1447 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.513 | 2.586 | 0.0721 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.805267 | 1.805267 | 1 | 66.9 | <0.0001 | Significant Effect |
| Error | 0.377793 | 0.02698521 | 14 | | | |
| Total | 2.18306 | 1.832253 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.749 | 8.885 | 0.2056 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9174 | 0.8408 | 0.1532 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 61.22% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-1768-8887 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 15.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 6.4 | 1.761 | 14 | 0.2185 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.818 | 2.586 | 0.9129 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.522508 | 2.522508 | 1 | 40.97 | <0.0001 | Significant Effect |
| Error | 0.8620572 | 0.06157551 | 14 | | | |
| Total | 3.384565 | 2.584083 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 7.554 | 8.885 | 0.0161 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.946 | 0.8408 | 0.4289 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-017 | 8 | 0.275 | 0.1738 | 0.3762 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 70.07% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-4211-5285 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 4.51% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 26.15 | 1.86 | 8 | 0.08318 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.186 | 2.586 | 0.2844 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.474507 | 5.474507 | 1 | 684 | <0.0001 | Significant Effect |
| Error | 0.1120501 | 0.008003579 | 14 | | | |
| Total | 5.586557 | 5.482511 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.945 | 8.885 | 0.0098 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8491 | 0.8408 | 0.0132 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-4099-2465 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 3.91% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.305 | 2.586 | 0.1804 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.608066 | 5.608066 | 1 | 779 | <0.0001 | Significant Effect |
| Error | 0.1007829 | 0.007198782 | 14 | | | |
| Total | 5.708848 | 5.615264 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 5.96 | 8.862 | 0.0285 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8251 | 0.8408 | 0.0060 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-9366-5649 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 3.91% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.305 | 2.586 | 0.1804 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.608066 | 5.608066 | 1 | 779 | <0.0001 | Significant Effect |
| Error | 0.1007829 | 0.007198782 | 14 | | | |
| Total | 5.708848 | 5.615264 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 5.96 | 8.862 | 0.0285 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8251 | 0.8408 | 0.0060 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-9542-5598 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 17.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 49.5 | | 14 | 4 | 0.0249 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.966 | 2.586 | 0.0042 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3187577 | 0.3187577 | 1 | 4.212 | 0.0593 | Non-Significant Effect |
| Error | 1.059557 | 0.07568267 | 14 | | | |
| Total | 1.378315 | 0.3944404 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.513 | 8.885 | 0.0082 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8386 | 0.8408 | 0.0093 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-011 | 8 | 0.7 | 0.5886 | 0.8114 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 23.81% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8543-6114 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 6.64% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | 1.551 | 1.761 | 14 | 0.112 | 0.0717 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.113 | 2.586 | 0.3683 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0389173 | 0.0389173 | 1 | 2.404 | 0.1433 | Non-Significant Effect |
| Error | 0.2266037 | 0.01618598 | 14 | | | |
| Total | 0.265521 | 0.05510328 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.248 | 8.885 | 0.7772 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9271 | 0.8408 | 0.2193 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | 6.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-1694-8974 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 7.66% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 0.1373 | 1.761 | 14 | 0.1253 | 0.4464 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.147 | 2.586 | 0.3269 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0003814854 | 0.0003814854 | 1 | 0.01884 | 0.8928 | Non-Significant Effect |
| Error | 0.2834434 | 0.02024596 | 14 | | | |
| Total | 0.2838249 | 0.02062744 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.812 | 8.885 | 0.4509 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9293 | 0.8408 | 0.2376 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | 1.36% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-4033-8180 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 11.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | 2.071 | 1.761 | 14 | 0.1683 | 0.0286 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.519 | 2.586 | 0.0700 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1567229 | 0.1567229 | 1 | 4.291 | 0.0573 | Non-Significant Effect |
| Error | 0.5113604 | 0.03652574 | 14 | | | |
| Total | 0.6680833 | 0.1932486 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.074 | 8.885 | 0.0838 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.917 | 0.8408 | 0.1507 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 16.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-6501-1418 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 8.15% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 2.022 | 1.761 | 14 | 0.1316 | 0.0313 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.794 | 2.586 | 0.9735 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.09128812 | 0.09128812 | 1 | 4.09 | 0.0627 | Non-Significant Effect |
| Error | 0.3125 | 0.02232143 | 14 | | | |
| Total | 0.4037881 | 0.1136095 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.101 | 8.885 | 0.3485 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9377 | 0.8408 | 0.3221 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | 11.56% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-4645-0557 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 5.71% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | 3.342 | 1.761 | 14 | 0.09972 | 0.0024 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.727 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.143224 | 0.143224 | 1 | 11.17 | 0.0048 | Significant Effect |
| Error | 0.1794977 | 0.01282127 | 14 | | | |
| Total | 0.3227217 | 0.1560452 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.28 | 8.885 | 0.7527 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9164 | 0.8408 | 0.1474 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | 13.61% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-1747-8866 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 7.05% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 1.297 | 1.761 | 14 | 0.1174 | 0.1077 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.934 | 2.586 | 0.6539 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02993499 | 0.02993499 | 1 | 1.683 | 0.2155 | Non-Significant Effect |
| Error | 0.2489626 | 0.01778305 | 14 | | | |
| Total | 0.2788976 | 0.04771804 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.47 | 8.885 | 0.6237 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9463 | 0.8408 | 0.4338 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | 6.12% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-5128-0127 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 35.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 0.407 | 1.761 | 14 | 0.3132 | 0.3451 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.294 | 2.586 | 0.1887 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0209547 | 0.0209547 | 1 | 0.1656 | 0.6902 | Non-Significant Effect |
| Error | 1.771273 | 0.1265195 | 14 | | | |
| Total | 1.792228 | 0.1474742 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.18 | 8.885 | 0.8327 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8788 | 0.8408 | 0.0372 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-011 | 8 | 0.7 | 0.5886 | 0.8114 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 6.67% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-8805-5460 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 23.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | -0.8597 | 1.761 | 14 | 0.228 | 0.7978 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.753 | 2.586 | 0.0193 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04953039 | 0.04953039 | 1 | 0.739 | 0.4045 | Non-Significant Effect |
| Error | 0.9383193 | 0.06702281 | 14 | | | |
| Total | 0.9878497 | 0.1165532 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.458 | 8.885 | 0.0250 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8891 | 0.8408 | 0.0540 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -14.17% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-2704-1250 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | -0.1429 | 1.771 | 13 | 0.1601 | 0.5557 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0006233061 | 0.0006233061 | 1 | 0.02043 | 0.8885 | Non-Significant Effect |
| Error | 0.3965815 | 0.03050627 | 13 | | | |
| Total | 0.3972048 | 0.03112957 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.511 | 9.155 | 0.2540 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9351 | 0.8328 | 0.3248 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -2.46% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-6210-5352 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 28.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 0.6566 | 1.761 | 14 | 0.2667 | 0.2610 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.354 | 2.586 | 0.1479 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03952954 | 0.03952954 | 1 | 0.4311 | 0.5221 | Non-Significant Effect |
| Error | 1.283593 | 0.09168524 | 14 | | | |
| Total | 1.323123 | 0.1312148 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.725 | 8.885 | 0.4891 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8466 | 0.8408 | 0.0121 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 8.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-3066-0525 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 26.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 1.834 | 1.761 | 14 | 0.2484 | 0.0440 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.527 | 2.586 | 0.0673 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.267477 | 0.267477 | 1 | 3.363 | 0.0880 | Non-Significant Effect |
| Error | 1.113436 | 0.07953116 | 14 | | | |
| Total | 1.380913 | 0.3470082 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.7 | 8.885 | 0.2134 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9379 | 0.8408 | 0.3244 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 28.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-6006-7468 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 26.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 3.311 | 1.761 | 14 | 0.2457 | 0.0026 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.555 | 2.586 | 0.0586 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8533574 | 0.8533574 | 1 | 10.97 | 0.0051 | Significant Effect |
| Error | 1.089509 | 0.07782204 | 14 | | | |
| Total | 1.942866 | 0.9311795 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.933 | 8.885 | 0.1790 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8916 | 0.8408 | 0.0591 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 52.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-4926-8967 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 32.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 3.485 | 1.761 | 14 | 0.2953 | 0.0018 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.126 | 2.586 | 0.3528 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.365186 | 1.365186 | 1 | 12.14 | 0.0036 | Significant Effect |
| Error | 1.573773 | 0.1124123 | 14 | | | |
| Total | 2.938958 | 1.477598 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.067 | 8.885 | 0.9338 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9516 | 0.8408 | 0.5153 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-017 | 8 | 0.275 | 0.1738 | 0.3762 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 63.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-7876-5210 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 21.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.958 | 2.586 | 0.0045 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.795899 | 3.795899 | 1 | 65.41 | <0.0001 | Significant Effect |
| Error | 0.8124985 | 0.0580356 | 14 | | | |
| Total | 4.608397 | 3.853934 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 5.613 | 8.862 | 0.0327 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7748 | 0.8408 | 0.0013 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-3873-9496 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.73% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.294364 | 4.294364 | 1 | 206.2 | <0.0001 | Significant Effect |
| Error | 0.2707607 | 0.02082774 | 13 | | | |
| Total | 4.565125 | 4.315192 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 10.21 | 9.33 | 0.0077 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7367 | 0.8328 | 0.0006 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8853-0212 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 21.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.958 | 2.586 | 0.0045 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.795899 | 3.795899 | 1 | 65.41 | <0.0001 | Significant Effect |
| Error | 0.8124985 | 0.0580356 | 14 | | | |
| Total | 4.608397 | 3.853934 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 5.613 | 8.862 | 0.0327 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7748 | 0.8408 | 0.0013 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-1157-4876 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 21.8% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.938 | 2.586 | 0.0053 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.686161 | 3.686161 | 1 | 62.65 | <0.0001 | Significant Effect |
| Error | 0.8237656 | 0.0588404 | 14 | | | |
| Total | 4.509926 | 3.745001 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 72.11 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.805 | 0.8408 | 0.0032 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.17% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-2486-7589 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.0% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.181525 | 4.181525 | 1 | 192.7 | <0.0001 | Significant Effect |
| Error | 0.2820278 | 0.02169445 | 13 | | | |
| Total | 4.463552 | 4.203219 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 28.04 | 9.155 | 0.0003 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7806 | 0.8328 | 0.0021 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-8499-5395 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 24.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | -0.9422 | 1.761 | 14 | 0.2307 | 0.8190 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.721 | 2.586 | 0.0235 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.06091597 | 0.06091597 | 1 | 0.8877 | 0.3621 | Non-Significant Effect |
| Error | 0.9606782 | 0.06861987 | 14 | | | |
| Total | 1.021594 | 0.1295358 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.483 | 8.885 | 0.0391 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9164 | 0.8408 | 0.1477 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -15.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-7939-0142 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 13.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | -0.2696 | 1.771 | 13 | 0.1645 | 0.6042 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.002342651 | 0.002342651 | 1 | 0.07269 | 0.7917 | Non-Significant Effect |
| Error | 0.4189404 | 0.03222618 | 13 | | | |
| Total | 0.421283 | 0.03456884 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.132 | 9.155 | 0.3448 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9664 | 0.8328 | 0.8009 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -3.21% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-4626-3407 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 24.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | -0.164 | 1.86 | 8 | 0.2346 | 0.5631 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.825 | 2.586 | 0.0121 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.001712262 | 0.001712262 | 1 | 0.0269 | 0.8721 | Non-Significant Effect |
| Error | 0.8912132 | 0.06365809 | 14 | | | |
| Total | 0.8929255 | 0.06537035 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 10.32 | 8.885 | 0.0064 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8908 | 0.8408 | 0.0573 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | -5.83% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-0478-5536 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 11.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | 0.9153 | 1.771 | 13 | 0.1503 | 0.1884 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0225196 | 0.0225196 | 1 | 0.8377 | 0.3767 | Non-Significant Effect |
| Error | 0.3494754 | 0.02688273 | 13 | | | |
| Total | 0.371995 | 0.04940233 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.013 | 9.155 | 0.0915 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9369 | 0.8328 | 0.3452 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | 5.02% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-6262-9495 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 25.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | -0.4351 | 1.761 | 14 | 0.2382 | 0.6649 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.635 | 2.586 | 0.0384 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01385086 | 0.01385086 | 1 | 0.1893 | 0.6701 | Non-Significant Effect |
| Error | 1.024215 | 0.07315825 | 14 | | | |
| Total | 1.038066 | 0.08700911 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.838 | 8.885 | 0.0969 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.915 | 0.8408 | 0.1399 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | -8.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-8943-6797 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 14.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | 0.3963 | 1.771 | 13 | 0.1766 | 0.3492 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.005828206 | 0.005828206 | 1 | 0.157 | 0.6983 | Non-Significant Effect |
| Error | 0.4824777 | 0.03711367 | 13 | | | |
| Total | 0.4883059 | 0.04294188 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.492 | 9.155 | 0.6095 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9643 | 0.8328 | 0.7672 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | 2.78% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-5850-0330 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 24.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | -1.501 | 1.761 | 14 | 0.2348 | 0.9223 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.673 | 2.586 | 0.0311 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1602379 | 0.1602379 | 1 | 2.254 | 0.1555 | Non-Significant Effect |
| Error | 0.9951589 | 0.07108278 | 14 | | | |
| Total | 1.155397 | 0.2313207 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.448 | 8.885 | 0.0673 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.892 | 0.8408 | 0.0599 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -20.83% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-7924-6146 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 13.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | -1.053 | 1.771 | 13 | 0.1712 | 0.8443 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03868388 | 0.03868388 | 1 | 1.109 | 0.3115 | Non-Significant Effect |
| Error | 0.4534211 | 0.03487855 | 13 | | | |
| Total | 0.492105 | 0.07356243 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.729 | 9.155 | 0.4895 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9392 | 0.8328 | 0.3727 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -8.44% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-8298-3991 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 27.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | -0.08102 | 1.761 | 14 | 0.2603 | 0.5317 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.411 | 2.586 | 0.1155 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0005734351 | 0.0005734351 | 1 | 0.006564 | 0.9366 | Non-Significant Effect |
| Error | 1.223076 | 0.08736257 | 14 | | | |
| Total | 1.223649 | 0.087936 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.979 | 8.885 | 0.3879 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9151 | 0.8408 | 0.1409 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | -2.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-7146-7401 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 23.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.644 | 1.761 | 14 | 0.2249 | 0.9388 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.79 | 2.586 | 0.0152 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1762563 | 0.1762563 | 1 | 2.702 | 0.1225 | Non-Significant Effect |
| Error | 0.9132814 | 0.06523439 | 14 | | | |
| Total | 1.089538 | 0.2414907 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.062 | 8.885 | 0.0133 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.893 | 0.8408 | 0.0621 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 0.0% |
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | -22.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-0603-6110 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.275 | 1.771 | 13 | 0.1549 | 0.8877 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04646247 | 0.04646247 | 1 | 1.626 | 0.2246 | Non-Significant Effect |
| Error | 0.3715436 | 0.02858028 | 13 | | | |
| Total | 0.4180061 | 0.07504275 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.134 | 9.155 | 0.1608 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9304 | 0.8328 | 0.2770 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | 0.0% |
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | -9.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0995-2713 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 43.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 2.767 | 1.761 | 14 | 0.3244 | 0.0076 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.528 | 2.586 | 0.0670 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.03872 | 1.03872 | 1 | 7.657 | 0.0151 | Significant Effect |
| Error | 1.89925 | 0.1356607 | 14 | | | |
| Total | 2.93797 | 1.174381 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.495 | 8.885 | 0.6090 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9084 | 0.8408 | 0.1098 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-017 | 8 | 0.275 | 0.1738 | 0.3762 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 61.06% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-5776-8952 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 36.8% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 44.5 | | 14 | 1 | 0.0052 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.929 | 2.586 | 0.0057 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5999089 | 0.5999089 | 1 | 5.936 | 0.0288 | Significant Effect |
| Error | 1.414986 | 0.1010704 | 14 | | | |
| Total | 2.014895 | 0.7009794 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.108 | 8.885 | 0.0821 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8346 | 0.8408 | 0.0082 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 49.56% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-2653-6868 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 16.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 5.132 | 1.771 | 13 | 0.178 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9931519 | 0.9931519 | 1 | 26.34 | 0.0002 | Significant Effect |
| Error | 0.4902272 | 0.03770978 | 13 | | | |
| Total | 1.483379 | 1.030862 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.114 | 10.79 | 0.9117 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9152 | 0.8328 | 0.1625 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 55.86% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0412-2814 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 37.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 1.148 | 1.761 | 14 | 0.2823 | 0.1352 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.904 | 2.586 | 0.0068 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1353844 | 0.1353844 | 1 | 1.317 | 0.2703 | Non-Significant Effect |
| Error | 1.438914 | 0.1027796 | 14 | | | |
| Total | 1.574298 | 0.238164 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.781 | 8.885 | 0.1004 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8616 | 0.8408 | 0.0203 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 23.89% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-3539-9144 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 17.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 3.036 | 1.771 | 13 | 0.1823 | 0.0048 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3645324 | 0.3645324 | 1 | 9.217 | 0.0096 | Significant Effect |
| Error | 0.514155 | 0.03955038 | 13 | | | |
| Total | 0.8786874 | 0.4040828 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.21 | 10.79 | 0.8324 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9638 | 0.8328 | 0.7577 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 33.41% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-2986-3252 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 39.4% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 61.5 | | 14 | 3 | 0.2527 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.746 | 2.586 | 0.0201 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.00245865 | 0.00245865 | 1 | 0.02139 | 0.8858 | Non-Significant Effect |
| Error | 1.609071 | 0.1149336 | 14 | | | |
| Total | 1.61153 | 0.1173923 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.416 | 8.885 | 0.2674 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8091 | 0.8408 | 0.0036 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 2.66% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-1077-6625 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 20.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 1.291 | 1.771 | 13 | 0.2103 | 0.1096 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.08773375 | 0.08773375 | 1 | 1.667 | 0.2192 | Non-Significant Effect |
| Error | 0.6843121 | 0.05263939 | 13 | | | |
| Total | 0.7720459 | 0.1403731 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.894 | 10.79 | 0.4543 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8782 | 0.8328 | 0.0446 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 14.82% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-1851-2027 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 34.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | 77 | | 14 | 4 | 0.8089 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.099 | 2.586 | 0.0013 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1382277 | 0.1382277 | 1 | 1.531 | 0.2363 | Non-Significant Effect |
| Error | 1.263797 | 0.09027121 | 14 | | | |
| Total | 1.402025 | 0.2284989 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.044 | 8.885 | 0.0095 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8121 | 0.8408 | 0.0040 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -21.24% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-1637-9377 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 13.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -0.6866 | 1.771 | 13 | 0.148 | 0.7478 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01229608 | 0.01229608 | 1 | 0.4715 | 0.5044 | Non-Significant Effect |
| Error | 0.339038 | 0.02607984 | 13 | | | |
| Total | 0.351334 | 0.03837593 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.977 | 9.155 | 0.3933 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9415 | 0.8328 | 0.4015 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -6.08% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-8904-8744 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 45.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | 66.5 | | 14 | 4 | 0.4392 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.406 | 2.586 | 0.1181 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.005441E-05 | 2.005441E-05 | 1 | 0.0001339 | 0.9909 | Non-Significant Effect |
| Error | 2.096751 | 0.1497679 | 14 | | | |
| Total | 2.096771 | 0.149788 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.187 | 8.885 | 0.8269 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.832 | 0.8408 | 0.0075 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-011 | 8 | 0.7 | 0.5886 | 0.8114 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 0.89% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-5186-3161 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 32.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 40 | | 14 | 1 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.266 | 2.586 | 0.0002 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.236656 | 3.236656 | 1 | 39.82 | <0.0001 | Significant Effect |
| Error | 1.137976 | 0.08128401 | 14 | | | |
| Total | 4.374633 | 3.31794 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 4.93 | 8.862 | 0.0434 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.694 | 0.8408 | 0.0001 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4669-0274 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.74% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.945638 | 3.945638 | 1 | 240.6 | <0.0001 | Significant Effect |
| Error | 0.2132172 | 0.01640132 | 13 | | | |
| Total | 4.158855 | 3.96204 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 22.15 | 9.33 | 0.0005 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8322 | 0.8328 | 0.0098 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-2458-1687 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 32.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 40 | | 14 | 1 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.266 | 2.586 | 0.0002 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.236656 | 3.236656 | 1 | 39.82 | <0.0001 | Significant Effect |
| Error | 1.137976 | 0.08128401 | 14 | | | |
| Total | 4.374633 | 3.31794 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 4.93 | 8.862 | 0.0434 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.694 | 0.8408 | 0.0001 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-4551-1292 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 9.74% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.945638 | 3.945638 | 1 | 240.6 | <0.0001 | Significant Effect |
| Error | 0.2132172 | 0.01640132 | 13 | | | |
| Total | 4.158855 | 3.96204 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 22.15 | 9.33 | 0.0005 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8322 | 0.8328 | 0.0098 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-5437-0654 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 32.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 40.5 | | 14 | 1 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.25 | 2.586 | 0.0002 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.135386 | 3.135386 | 1 | 38.2 | <0.0001 | Significant Effect |
| Error | 1.149243 | 0.08208881 | 14 | | | |
| Total | 4.284629 | 3.217474 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 101 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7131 | 0.8408 | 0.0002 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.12% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-3716-6953 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.4% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 13.96 | 1.943 | 6 | 0.1412 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.837509 | 3.837509 | 1 | 222.2 | <0.0001 | Significant Effect |
| Error | 0.2244843 | 0.01726802 | 13 | | | |
| Total | 4.061993 | 3.854777 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 22.08 | 9.155 | 0.0006 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.862 | 0.8328 | 0.0258 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.23% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-2730-0261 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 35.0% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | 77 | | 14 | 4 | 0.8089 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.072 | 2.586 | 0.0017 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1568534 | 0.1568534 | 1 | 1.707 | 0.2124 | Non-Significant Effect |
| Error | 1.286156 | 0.09186827 | 14 | | | |
| Total | 1.443009 | 0.2487217 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 7.68 | 8.885 | 0.0153 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8203 | 0.8408 | 0.0051 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -22.12% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-2265-0235 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 13.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | -0.8056 | 1.771 | 13 | 0.1528 | 0.7825 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01804255 | 0.01804255 | 1 | 0.649 | 0.4350 | Non-Significant Effect |
| Error | 0.3613968 | 0.02779976 | 13 | | | |
| Total | 0.3794394 | 0.0458423 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.679 | 9.155 | 0.5125 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9642 | 0.8328 | 0.7643 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -6.86% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-8056-7136 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 33.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | 67 | | 14 | 3 | 0.4796 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.158 | 2.586 | 0.0007 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0363341 | 0.0363341 | 1 | 0.4181 | 0.5284 | Non-Significant Effect |
| Error | 1.216691 | 0.08690649 | 14 | | | |
| Total | 1.253025 | 0.1232406 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 14.46 | 8.885 | 0.0023 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7947 | 0.8408 | 0.0023 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | -12.39% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-1744-4166 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | 0.428 | 1.771 | 13 | 0.1373 | 0.3378 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.004114418 | 0.004114418 | 1 | 0.1832 | 0.6756 | Non-Significant Effect |
| Error | 0.2919319 | 0.0224563 | 13 | | | |
| Total | 0.2960463 | 0.02657072 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.16 | 9.155 | 0.1579 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9541 | 0.8328 | 0.5916 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | 1.66% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-7005-4598 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 35.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | 71.5 | | 14 | 4 | 0.6008 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.999 | 2.586 | 0.0032 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0712491 | 0.0712491 | 1 | 0.739 | 0.4044 | Non-Significant Effect |
| Error | 1.349693 | 0.09640665 | 14 | | | |
| Total | 1.420942 | 0.1676558 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.375 | 8.885 | 0.0412 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8361 | 0.8408 | 0.0086 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | -15.04% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2007-7465 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 15.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -0.05298 | 1.771 | 13 | 0.1657 | 0.5207 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 9.17556E-05 | 9.17556E-05 | 1 | 0.002807 | 0.9586 | Non-Significant Effect |
| Error | 0.4249342 | 0.03268724 | 13 | | | |
| Total | 0.4250259 | 0.032779 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.175 | 9.155 | 0.8274 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9095 | 0.8328 | 0.1329 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | -0.66% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-4878-8758 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 35.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | 85.5 | | 14 | 3 | 0.9585 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.032 | 2.586 | 0.0024 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3019863 | 0.3019863 | 1 | 3.201 | 0.0952 | Non-Significant Effect |
| Error | 1.320637 | 0.09433118 | 14 | | | |
| Total | 1.622623 | 0.3963175 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.23 | 8.885 | 0.0276 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8274 | 0.8408 | 0.0064 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -28.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-9547-4030 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 14.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | -1.619 | 1.771 | 13 | 0.1599 | 0.9353 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0798649 | 0.0798649 | 1 | 2.623 | 0.1293 | Non-Significant Effect |
| Error | 0.3958776 | 0.03045212 | 13 | | | |
| Total | 0.4757425 | 0.110317 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.362 | 9.155 | 0.6899 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9215 | 0.8328 | 0.2032 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -12.28% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-6580-2892 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 38.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | -0.5207 | 1.761 | 14 | 0.2929 | 0.6947 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.8 | 2.586 | 0.0143 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02999204 | 0.02999204 | 1 | 0.2711 | 0.6107 | Non-Significant Effect |
| Error | 1.548554 | 0.110611 | 14 | | | |
| Total | 1.578546 | 0.140603 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.772 | 8.885 | 0.2020 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8611 | 0.8408 | 0.0199 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | -8.85% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-4779-7995 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 19.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | 0.3697 | 1.771 | 13 | 0.2008 | 0.3588 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.006558666 | 0.006558666 | 1 | 0.1367 | 0.7176 | Non-Significant Effect |
| Error | 0.6237946 | 0.0479842 | 13 | | | |
| Total | 0.6303533 | 0.05454287 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.651 | 10.79 | 0.5582 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9634 | 0.8328 | 0.7504 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 4.76% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-1921-1976 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 34.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | 85 | | 14 | 4 | 0.9585 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.13 | 2.586 | 0.0009 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3238344 | 0.3238344 | 1 | 3.66 | 0.0764 | Non-Significant Effect |
| Error | 1.238759 | 0.08848279 | 14 | | | |
| Total | 1.562593 | 0.4123172 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 11.29 | 8.885 | 0.0049 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7999 | 0.8408 | 0.0027 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | -30.09% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-5074-3802 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | -1.94 | 1.771 | 13 | 0.1424 | 0.9628 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.09088606 | 0.09088606 | 1 | 3.763 | 0.0744 | Non-Significant Effect |
| Error | 0.3140001 | 0.02415385 | 13 | | | |
| Total | 0.4048862 | 0.1150399 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.468 | 9.155 | 0.2625 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9316 | 0.8328 | 0.2882 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.0% |
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | -13.83% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-1904-0441 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 43.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | 72.5 | | 14 | 4 | 0.6395 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.495 | 2.586 | 0.0788 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02227126 | 0.02227126 | 1 | 0.1599 | 0.6953 | Non-Significant Effect |
| Error | 1.950475 | 0.1393196 | 14 | | | |
| Total | 1.972746 | 0.1615909 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.401 | 8.885 | 0.6678 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.835 | 0.8408 | 0.0083 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 0.0% |
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | -6.2% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-7609-2289 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 22.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 4.866 | 1.761 | 14 | 0.2332 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.703 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.66089 | 1.66089 | 1 | 23.68 | 0.0002 | Significant Effect |
| Error | 0.9819647 | 0.07014034 | 14 | | | |
| Total | 2.642855 | 1.731031 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.45 | 8.885 | 0.1246 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9273 | 0.8408 | 0.2206 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-017 | 8 | 0.275 | 0.1738 | 0.3762 | 0 | 0.65 | 0.09402 | 0.2659 | 96.7% | 66.15% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-2837-8962 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 15.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 5.538 | 1.761 | 14 | 0.166 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.189 | 2.586 | 0.2813 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.090181 | 1.090181 | 1 | 30.67 | <0.0001 | Significant Effect |
| Error | 0.4977005 | 0.03555004 | 14 | | | |
| Total | 1.587881 | 1.125731 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.255 | 8.885 | 0.7719 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9658 | 0.8408 | 0.7664 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-016 | 8 | 0.3563 | 0.2932 | 0.4193 | 0.05 | 0.55 | 0.05858 | 0.1657 | 46.51% | 56.15% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-8188-5555 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 15.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 3.303 | 1.761 | 14 | 0.17 | 0.0026 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.853 | 2.586 | 0.8281 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4064389 | 0.4064389 | 1 | 10.91 | 0.0052 | Significant Effect |
| Error | 0.5216283 | 0.03725917 | 14 | | | |
| Total | 0.9280672 | 0.443698 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.364 | 8.885 | 0.6927 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9292 | 0.8408 | 0.2369 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-015 | 8 | 0.5375 | 0.4637 | 0.6113 | 0.25 | 0.85 | 0.06863 | 0.1941 | 36.11% | 33.85% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-7107-8336 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 18.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 1.436 | 1.761 | 14 | 0.1958 | 0.0865 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.743 | 2.586 | 0.0205 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1018658 | 0.1018658 | 1 | 2.062 | 0.1730 | Non-Significant Effect |
| Error | 0.6917855 | 0.04941325 | 14 | | | |
| Total | 0.7936512 | 0.151279 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.135 | 8.885 | 0.3384 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9094 | 0.8408 | 0.1137 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-014 | 8 | 0.6875 | 0.599 | 0.776 | 0.15 | 0.9 | 0.08224 | 0.2326 | 33.83% | 15.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-7137-0784 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 11.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 0.9672 | 1.771 | 13 | 0.1381 | 0.1756 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02124014 | 0.02124014 | 1 | 0.9354 | 0.3511 | Non-Significant Effect |
| Error | 0.2951948 | 0.02270729 | 13 | | | |
| Total | 0.3164349 | 0.04394744 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.539 | 10.79 | 0.2766 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9074 | 0.8328 | 0.1235 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-014 | 7 | 0.7643 | 0.7301 | 0.7985 | 0.65 | 0.9 | 0.03401 | 0.08997 | 11.77% | 5.93% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-8410-0106 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | -0.6497 | 1.761 | 14 | 0.1385 | 0.7368 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.055 | 2.586 | 0.4471 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01044697 | 0.01044697 | 1 | 0.4221 | 0.5264 | Non-Significant Effect |
| Error | 0.3465113 | 0.02475081 | 14 | | | |
| Total | 0.3569583 | 0.03519778 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.754 | 8.885 | 0.4759 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9743 | 0.8408 | 0.9019 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-013 | 8 | 0.8562 | 0.819 | 0.8935 | 0.65 | 0.95 | 0.03464 | 0.09797 | 11.44% | -5.39% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-9602-0547 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 25.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 0.9133 | 1.761 | 14 | 0.2556 | 0.1883 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.811 | 2.586 | 0.0132 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.07027864 | 0.07027864 | 1 | 0.8342 | 0.3765 | Non-Significant Effect |
| Error | 1.179465 | 0.0842475 | 14 | | | |
| Total | 1.249744 | 0.1545261 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.344 | 8.885 | 0.0714 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8857 | 0.8408 | 0.0477 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-011 | 8 | 0.7 | 0.5886 | 0.8114 | 0.05 | 1 | 0.1035 | 0.2928 | 41.82% | 13.85% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-4096-0065 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 8.92% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.575 | 2.586 | 0.0527 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.279315 | 4.279315 | 1 | 271.5 | <0.0001 | Significant Effect |
| Error | 0.2206905 | 0.01576361 | 14 | | | |
| Total | 4.500005 | 4.295078 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 15.57 | 8.862 | 0.0015 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8117 | 0.8408 | 0.0039 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0504-2244 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 8.92% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.575 | 2.586 | 0.0527 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.279315 | 4.279315 | 1 | 271.5 | <0.0001 | Significant Effect |
| Error | 0.2206905 | 0.01576361 | 14 | | | |
| Total | 4.500005 | 4.295078 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 15.57 | 8.862 | 0.0015 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8117 | 0.8408 | 0.0039 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-6072-6010 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 15.85 | 1.895 | 7 | 0.1219 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.512 | 2.586 | 0.0724 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.162748 | 4.162748 | 1 | 251.2 | <0.0001 | Significant Effect |
| Error | 0.2319576 | 0.0165684 | 14 | | | |
| Total | 4.394706 | 4.179317 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 19.59 | 8.885 | 0.0009 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.863 | 0.8408 | 0.0213 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-005 | 8 | 0.00625 | 0 | 0.01297 | 0 | 0.05 | 0.00625 | 0.01768 | 282.8% | 99.23% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4615-4469 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 12.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | -0.7791 | 1.761 | 14 | 0.1429 | 0.7756 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.992 | 2.586 | 0.5475 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0159941 | 0.0159941 | 1 | 0.607 | 0.4489 | Non-Significant Effect |
| Error | 0.3688702 | 0.02634787 | 14 | | | |
| Total | 0.3848643 | 0.04234197 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.489 | 8.885 | 0.6122 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8879 | 0.8408 | 0.0515 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-004 | 8 | 0.8625 | 0.8277 | 0.8973 | 0.75 | 1 | 0.03239 | 0.09161 | 10.62% | -6.15% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-7862-1453 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 10.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | 0.54 | 1.761 | 14 | 0.1288 | 0.2989 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.211 | 2.586 | 0.2595 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.006235364 | 0.006235364 | 1 | 0.2916 | 0.5977 | Non-Significant Effect |
| Error | 0.2994052 | 0.02138609 | 14 | | | |
| Total | 0.3056406 | 0.02762145 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.804 | 8.885 | 0.1972 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9142 | 0.8408 | 0.1362 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-002 | 8 | 0.7937 | 0.7625 | 0.825 | 0.7 | 0.9 | 0.02903 | 0.0821 | 10.34% | 2.31% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-5350-3924 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 13.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 0.0151 | 1.761 | 14 | 0.1548 | 0.4941 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.84 | 2.586 | 0.8583 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 7.044432E-06 | 7.044432E-06 | 1 | 0.0002281 | 0.9882 | Non-Significant Effect |
| Error | 0.4324075 | 0.03088625 | 14 | | | |
| Total | 0.4324145 | 0.03089329 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.042 | 8.885 | 0.9577 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9227 | 0.8408 | 0.1867 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-001 | 8 | 0.8125 | 0.763 | 0.862 | 0.6 | 0.95 | 0.04605 | 0.1302 | 16.03% | 0.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-8229-1256 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 13.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | -1.649 | 1.761 | 14 | 0.1495 | 0.9393 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.905 | 2.586 | 0.7125 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.07837393 | 0.07837393 | 1 | 2.72 | 0.1213 | Non-Significant Effect |
| Error | 0.4033509 | 0.02881078 | 14 | | | |
| Total | 0.4817249 | 0.1071847 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.208 | 8.885 | 0.8093 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9574 | 0.8408 | 0.6146 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-012 | 8 | 0.9063 | 0.8676 | 0.9449 | 0.7 | 1 | 0.0359 | 0.1016 | 11.21% | -11.54% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3759-5221 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 17.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 0.454 | 1.761 | 14 | 0.187 | 0.3284 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.267 | 2.586 | 0.2097 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.00929244 | 0.00929244 | 1 | 0.2061 | 0.6568 | Non-Significant Effect |
| Error | 0.631268 | 0.04509057 | 14 | | | |
| Total | 0.6405604 | 0.05438301 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.86 | 8.885 | 0.4316 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9566 | 0.8408 | 0.6010 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-010 | 8 | 0.7687 | 0.6941 | 0.8434 | 0.35 | 1 | 0.0694 | 0.1963 | 25.53% | 5.39% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-1293-6571 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 11.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | -1.976 | 1.761 | 14 | 0.1334 | 0.9659 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.134 | 2.586 | 0.3427 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.08969133 | 0.08969133 | 1 | 3.906 | 0.0682 | Non-Significant Effect |
| Error | 0.3214734 | 0.02296239 | 14 | | | |
| Total | 0.4111648 | 0.1126537 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.19 | 8.885 | 0.3228 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9262 | 0.8408 | 0.2124 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-009 | 8 | 0.9187 | 0.894 | 0.9435 | 0.8 | 1 | 0.02302 | 0.06512 | 7.09% | -13.08% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-8079-5024 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 23.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 0.443 | 1.761 | 14 | 0.2392 | 0.3323 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.623 | 2.586 | 0.0409 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01448263 | 0.01448263 | 1 | 0.1962 | 0.6645 | Non-Significant Effect |
| Error | 1.033189 | 0.07379921 | 14 | | | |
| Total | 1.047672 | 0.08828184 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.682 | 8.885 | 0.1070 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9296 | 0.8408 | 0.2402 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-008 | 8 | 0.75 | 0.6415 | 0.8585 | 0.15 | 1 | 0.1009 | 0.2854 | 38.05% | 7.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-6225-7317 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 16.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | -0.3795 | 1.771 | 13 | 0.1782 | 0.6448 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.005443274 | 0.005443274 | 1 | 0.144 | 0.7105 | Non-Significant Effect |
| Error | 0.4914511 | 0.03780394 | 13 | | | |
| Total | 0.4968944 | 0.04324721 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.431 | 9.155 | 0.6455 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9661 | 0.8328 | 0.7972 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-008 | 7 | 0.8357 | 0.7739 | 0.8976 | 0.5 | 1 | 0.06145 | 0.1626 | 19.45% | -2.86% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3277-2560 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 27.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 64.5 | | 14 | 2 | 0.3605 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.989 | 2.586 | 0.0035 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.07267305 | 0.07267305 | 1 | 0.7488 | 0.4014 | Non-Significant Effect |
| Error | 1.358667 | 0.09704762 | 14 | | | |
| Total | 1.43134 | 0.1697207 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.156 | 8.885 | 0.0460 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8316 | 0.8408 | 0.0074 | Non-normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-003 | 8 | 0.7062 | 0.5862 | 0.8263 | 0 | 0.95 | 0.1116 | 0.3156 | 44.69% | 13.08% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-0285-7907 | **Endpoint:** | Proportion Survived | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Angular (Corrected) | 0 | C > T | Not Run | Sample passes proportion survived endpoint | 15.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 0.06647 | 1.771 | 13 | 0.1674 | 0.4740 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0001474537 | 0.0001474537 | 1 | 0.004418 | 0.9480 | Non-Significant Effect |
| Error | 0.4339076 | 0.03337751 | 13 | | | |
| Total | 0.4340551 | 0.03352496 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.127 | 9.155 | 0.8673 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9496 | 0.8328 | 0.5179 | Normal Distribution |

**Proportion Survived Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 0.8125 | 0.7673 | 0.8577 | 0.7 | 1 | 0.04199 | 0.1188 | 14.62% | 0.0% |
| 19830-003 | 7 | 0.8071 | 0.7518 | 0.8625 | 0.55 | 0.95 | 0.05502 | 0.1456 | 18.04% | 0.66% |

## *Leptocheirus plumulosus* Sediment Evaluation

**STUDY NUMBER:** 20101 **CLIENT:** HDR Engineering, Inc.

**PROJECT:** Gowanus Canal **START DATE:** 10/14/10

| | REP | TARE WEIGHT (mg) | *L. Plumulosus* + FOIL (mg) | NET WEIGHT (mg) | # *L. Plumulosus* | MEAN DRY WEIGHT PER Individual (mg) |
|---|---|---|---|---|---|---|
| START ORGANISMS | A | 208.86 | 210.42 | 1.56 | 20 ~~10~~ | 0.078 |
| | B | 208.58 | 210.74 | 2.16 | 20 ~~10~~ | 0.108 |
| | C | 209.39 | 211.55 | 2.16 | 20 ~~10~~ | 0.108 |
| | D | 206.29 | 208.27 | 1.98 | 20 ~~10~~ | 0.099 |
| RECORDED BY: | | Am | Am | Overall Mean Dry Weight Per Individual: | | |
| DATE: | | 10/14/10 | 10/18/10 | 0.0983 | | |

**NOTES:**

STUDY: 20201
CLIENT: HDR Engineering, Inc.
PROJECT: Gowanus Canal
ASSAY: Leptocheirus plumulosus 28 Day
TASK: Dry Weight Data - AccuSeries Balance Output File
BALANCE: AccuSeries Model 225D
SERIAL #: 17008376

| Sample | Date/Init: | 11/15/10 AM | 11/8/10 JTP | Duplicates | |
|---|---|---|---|---|---|
| Number | Rep. | Total Wt (mg) | Tare Wt (mg) | Total Wt (mg) | Tare Wt (mg) |
| 000 | 1 | 218.51 | 207.21 | | |
| 000 | 2 | 228.54 | 206.51 | | |
| 000 | 3 | 233.02 | 206.61 | | |
| 000 | 4 | 235.46 | 208.27 | | |
| 000 | 5 | 222.11 | 204.11 | | |
| 000 | 6 | 232.82 | 205.57 | | |
| 000 | 7 | 226.07 | 206.23 | | |
| 000 | 8 | 221.70 | 204.51 | | |
| 001 | 1 | 219.77 | 207.53 | | |
| 001 | 2 | 219.76 | 210.07 | | |
| 001 | 3 | 214.62 | 204.89 | | |
| 001 | 4 | 221.55 | 207.24 | | |
| 001 | 5 | 217.60 | 208.25 | | |
| 001 | 6 | 223.15 | 208.32 | | |
| 001 | 7 | 212.40 | 206.51 | | |
| 001 | 8 | | 207.97 | | |
| 002 | 1 | 229.83 | 206.70 | | |
| 002 | 2 | 227.57 | 205.78 | | |
| 002 | 3 | 223.75 | 206.88 | | |
| 002 | 4 | 220.68 | 207.33 | 220.71 | 207.34 |
| 002 | 5 | 225.59 | 208.50 | | |
| 002 | 6 | 209.35 | 207.98 | | |
| 002 | 7 | 219.55 | 207.91 | | |
| 002 | 8 | 230.80 | 208.49 | | |
| 003 | 1 | 229.93 | 209.23 | | |
| 003 | 2 | 229.14 | 206.86 | | |
| 003 | 3 | 230.77 | 207.08 | | |
| 003 | 4 | 232.48 | 205.83 | | |
| 003 | 5 | 227.34 | 207.04 | | |
| 003 | 6 | 231.42 | 206.67 | | |
| 003 | 7 | 222.18 | 207.67 | | |
| 003 | 8 | 230.52 | 207.00 | | |
| 004 | 1 | 224.61 | 207.54 | | |
| 004 | 2 | 226.67 | 208.04 | | |
| 004 | 3 | 224.38 | 209.64 | | |
| 004 | 4 | 225.40 | 208.18 | | |
| 004 | 5 | 217.89 | 209.13 | | |
| 004 | 6 | 215.08 | 204.22 | | |
| 004 | 7 | 212.14 | 208.39 | | |
| 004 | 8 | 225.75 | 208.22 | 225.74 | 208.23 |
| 005 | 1 | 228.38 | 205.85 | | |
| 005 | 2 | 222.94 | 207.12 | | |
| 005 | 3 | 220.72 | 206.65 | | |
| 005 | 4 | 222.46 | 206.33 | | |

| Sample Number | Date/Init: Rep. | 11/15/10 AM Total Wt (mg) | 11/8/10 JTP Tare Wt (mg) | Duplicates Total Wt (mg) | Duplicates Tare Wt (mg) |
|---|---|---|---|---|---|
| 005 | 5 | 225.17 | 207.76 | | |
| 005 | 6 | 223.46 | 206.68 | | |
| 005 | 7 | 220.29 | 208.23 | | |
| 005 | 8 | 220.77 | 209.04 | | |
| 006 | 1 | 228.99 | 207.17 | | |
| 006 | 2 | 216.35 | 206.92 | | |
| 006 | 3 | 223.29 | 208.31 | | |
| 006 | 4 | 219.21 | 208.86 | | |
| 006 | 5 | 232.16 | 208.74 | | |
| 006 | 6 | 227.91 | 207.56 | | |
| 006 | 7 | 227.69 | 207.20 | | |
| 006 | 8 | 229.75 | 208.87 | | |
| 007 | 1 | 221.23 | 206.60 | | |
| 007 | 2 | 220.37 | 206.65 | | |
| 007 | 3 | 218.60 | 207.99 | | |
| 007 | 4 | 223.45 | 207.66 | 223.45 | 207.67 |
| 007 | 5 | 215.22 | 208.63 | | |
| 007 | 6 | 220.79 | 207.99 | | |
| 007 | 7 | 218.19 | 207.75 | | |
| 007 | 8 | 215.44 | 207.94 | | |
| 008 | 1 | 213.50 | 206.35 | | |
| 008 | 2 | 220.35 | 209.05 | | |
| 008 | 3 | 218.21 | 206.01 | | |
| 008 | 4 | 217.97 | 206.57 | | |
| 008 | 5 | 226.13 | 206.99 | | |
| 008 | 6 | 214.09 | 204.16 | | |
| 008 | 7 | 228.07 | 209.33 | | |
| 008 | 8 | 222.32 | 209.24 | | |
| 009 | 1 | 208.05 | 207.61 | | |
| 009 | 2 | | 206.85 | | |
| 009 | 3 | | 207.17 | | |
| 009 | 4 | | 208.14 | | |
| 009 | 5 | | 207.81 | | |
| 009 | 6 | | 207.73 | | |
| 009 | 7 | | 208.42 | | |
| 009 | 8 | | 205.61 | | 205.62 |
| 010 | 1 | | 209.21 | | |
| 010 | 2 | | 208.23 | | |
| 010 | 3 | | 206.17 | | |
| 010 | 4 | | 205.39 | | |
| 010 | 5 | | 207.66 | | |
| 010 | 6 | | 209.47 | | |
| 010 | 7 | | 209.33 | | |
| 010 | 8 | | 209.32 | | |
| 011 | 1 | | 208.51 | | |
| 011 | 2 | | 210.75 | | |
| 011 | 3 | | 209.09 | | |
| 011 | 4 | | 205.84 | | |
| 011 | 5 | | 209.96 | | |
| 011 | 6 | | 209.94 | | |
| 011 | 7 | | 211.72 | | |
| 011 | 8 | | 210.52 | | |
| 012 | 1 | 219.69 | 205.85 | 219.69 | |

| Sample Number | Date/Init: Rep. | 11/15/10 AM Total Wt (mg) | 11/8/10 JTP Tare Wt (mg) | Duplicates Total Wt (mg) | Duplicates Tare Wt (mg) |
|---|---|---|---|---|---|
| 012 | 2 | 222.36 | 208.12 | | |
| 012 | 3 | 221.76 | 208.37 | | |
| 012 | 4 | 210.11 | 209.75 | 210.12 | 209.75 |
| 012 | 5 | 227.00 | 206.64 | | |
| 012 | 6 | 219.97 | 208.97 | | |
| 012 | 7 | 226.00 | 210.06 | | |
| 012 | 8 | 222.09 | 208.04 | | |
| 013 | 1 | 227.69 | 211.44 | | |
| 013 | 2 | 215.38 | 207.42 | | |
| 013 | 3 | 221.14 | 211.42 | | |
| 013 | 4 | 221.02 | 208.83 | | |
| 013 | 5 | 220.30 | 208.64 | | |
| 013 | 6 | 223.67 | 206.76 | | |
| 013 | 7 | 217.90 | 205.28 | | |
| 013 | 8 | 228.93 | 209.67 | | |
| 014 | 1 | 208.84 | 207.78 | | |
| 014 | 2 | 215.67 | 209.18 | | |
| 014 | 3 | 216.91 | 206.12 | | |
| 014 | 4 | 217.75 | 206.34 | | |
| 014 | 5 | 214.40 | 206.64 | | |
| 014 | 6 | 217.10 | 209.11 | | |
| 014 | 7 | 220.75 | 208.15 | | |
| 014 | 8 | 219.07 | 210.24 | 219.08 | 210.25 |
| 015 | 1 | 211.07 | 206.93 | | |
| 015 | 2 | 216.29 | 210.23 | | |
| 015 | 3 | 208.88 | 205.74 | | |
| 015 | 4 | 210.61 | 209.36 | | |
| 015 | 5 | 213.48 | 208.76 | | |
| 015 | 6 | 210.37 | 208.64 | | |
| 015 | 7 | 208.32 | 206.08 | | |
| 015 | 8 | 213.97 | 209.24 | | |
| 016 | 1 | 210.02 | 205.99 | | |
| 016 | 2 | 212.76 | 209.31 | | |
| 016 | 3 | 213.25 | 210.64 | | |
| 016 | 4 | 212.13 | 209.70 | | |
| 016 | 5 | 210.65 | 209.97 | | |
| 016 | 6 | 209.37 | 208.92 | | |
| 016 | 7 | 211.49 | 209.39 | | |
| 016 | 8 | 211.92 | 210.91 | | |
| 017 | 1 | 215.68 | 208.51 | | |
| 017 | 2 | 216.27 | 208.56 | | |
| 017 | 3 | 209.00 | 206.03 | | |
| 017 | 4 | | 208.10 | | 208.10 |
| 017 | 5 | 211.29 | 210.67 | 211.30 | |
| 017 | 6 | | 212.06 | | |
| 017 | 7 | 212.77 | 212.02 | | |
| 017 | 8 | 211.78 | 210.25 | | |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-7153-3161 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 21.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | 0.1505 | 1.761 | 14 | 0.1858 | 0.4412 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.457 | 2.586 | 0.0939 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.001009057 | 0.001009057 | 1 | 0.02266 | 0.8825 | Non-Significant Effect |
| Error | 0.6234252 | 0.04453038 | 14 | | | |
| Total | 0.6244343 | 0.04553943 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.755 | 8.885 | 0.4757 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9563 | 0.8408 | 0.5957 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-011 | 8 | 0.8609 | 0.7703 | 0.9515 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | 1.81% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-7774-4212 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 1.297 | 1.761 | 14 | 0.1483 | 0.1078 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.9 | 2.586 | 0.7237 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04768465 | 0.04768465 | 1 | 1.682 | 0.2156 | Non-Significant Effect |
| Error | 0.3968775 | 0.02834839 | 14 | | | |
| Total | 0.4445621 | 0.07603304 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.327 | 8.885 | 0.7184 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9708 | 0.8408 | 0.8515 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-013 | 8 | 0.7676 | 0.7082 | 0.827 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | 12.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-9087-1130 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 3.518 | 1.761 | 14 | 0.1469 | 0.0017 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.917 | 2.586 | 0.6872 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3443615 | 0.3443615 | 1 | 12.37 | 0.0034 | Significant Effect |
| Error | 0.3896064 | 0.02782903 | 14 | | | |
| Total | 0.7339679 | 0.3721905 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.386 | 8.885 | 0.6775 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9768 | 0.8408 | 0.9329 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-014 | 8 | 0.5834 | 0.5253 | 0.6415 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 33.46% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-4380-9718 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 14.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 8.013 | 1.761 | 14 | 0.1233 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.284 | 2.586 | 0.1963 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.259088 | 1.259088 | 1 | 64.2 | <0.0001 | Significant Effect |
| Error | 0.2745515 | 0.01961082 | 14 | | | |
| Total | 1.53364 | 1.278699 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.693 | 8.885 | 0.0588 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.974 | 0.8408 | 0.8979 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 63.99% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-6805-1406 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 14.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 7.817 | 1.761 | 14 | 0.1306 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.157 | 2.586 | 0.3164 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.344017 | 1.344017 | 1 | 61.1 | <0.0001 | Significant Effect |
| Error | 0.3079581 | 0.02199701 | 14 | | | |
| Total | 1.651975 | 1.366014 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.772 | 8.885 | 0.2019 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9752 | 0.8408 | 0.9142 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-016 | 8 | 0.2971 | 0.256 | 0.3382 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 66.11% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-9037-3393 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 4.726 | 1.782 | 12 | 0.1744 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.775 | 2.507 | 0.8658 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7329088 | 0.7329088 | 1 | 22.33 | 0.0005 | Significant Effect |
| Error | 0.3937927 | 0.03281606 | 12 | | | |
| Total | 1.126702 | 0.7657249 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.036 | 9.522 | 0.9300 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9506 | 0.8239 | 0.5696 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-017 | 6 | 0.4144 | 0.3448 | 0.4841 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 52.73% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-5946-8398 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 20.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | -1.923 | 1.761 | 14 | 0.1791 | 0.9625 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.03 | 2.586 | 0.4860 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1528726 | 0.1528726 | 1 | 3.697 | 0.0751 | Non-Significant Effect |
| Error | 0.5788288 | 0.04134491 | 14 | | | |
| Total | 0.7317014 | 0.1942175 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.558 | 8.885 | 0.5731 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9799 | 0.8408 | 0.9630 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-001 | 8 | 1.072 | 0.9869 | 1.158 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | -22.3% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-4689-2080 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 1.564 | 1.761 | 14 | 0.1715 | 0.0700 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.144 | 2.586 | 0.3302 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.09276793 | 0.09276793 | 1 | 2.447 | 0.1400 | Non-Significant Effect |
| Error | 0.5306809 | 0.03790578 | 14 | | | |
| Total | 0.6234488 | 0.1306737 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.345 | 8.885 | 0.7058 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9581 | 0.8408 | 0.6272 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-002 | 8 | 0.7245 | 0.6452 | 0.8038 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | 17.37% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0842-1401 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 21.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 1.242 | 1.761 | 14 | 0.1852 | 0.1173 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.215 | 2.586 | 0.2554 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.06825805 | 0.06825805 | 1 | 1.543 | 0.2345 | Non-Significant Effect |
| Error | 0.6191213 | 0.04422295 | 14 | | | |
| Total | 0.6873794 | 0.112481 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.736 | 8.885 | 0.4842 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.943 | 0.8408 | 0.3878 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-004 | 8 | 0.7462 | 0.656 | 0.8363 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | 14.9% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1151-0452 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 41.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 2.29 | 1.895 | 7 | 0.3613 | 0.0279 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.837 | 2.215 | 0.3610 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1695797 | 0.1695797 | 1 | 5.245 | 0.0558 | Non-Significant Effect |
| Error | 0.2263229 | 0.03233184 | 7 | | | |
| Total | 0.3959026 | 0.2019115 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9779 | 0.7007 | 0.9525 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 0.0% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 49.82% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-1103-3495 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 17.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 6.374 | 1.761 | 14 | 0.1475 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.972 | 2.586 | 0.5820 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.13963 | 1.13963 | 1 | 40.62 | <0.0001 | Significant Effect |
| Error | 0.3927643 | 0.02805459 | 14 | | | |
| Total | 1.532394 | 1.167684 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 7.144 | 8.885 | 0.0188 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9916 | 0.8408 | 0.9998 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 62.83% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-8969-7582 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 18.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 6.332 | 1.761 | 14 | 0.1537 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.893 | 2.586 | 0.7369 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.220496 | 1.220496 | 1 | 40.09 | <0.0001 | Significant Effect |
| Error | 0.4261709 | 0.03044078 | 14 | | | |
| Total | 1.646667 | 1.250937 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.22 | 8.885 | 0.0768 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9808 | 0.8408 | 0.9696 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-016 | 8 | 0.2971 | 0.256 | 0.3382 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 65.02% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-1771-9990 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 3.9 | 1.782 | 12 | 0.1988 | 0.0011 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.608 | 2.507 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.6489775 | 0.6489775 | 1 | 15.21 | 0.0021 | Significant Effect |
| Error | 0.5120056 | 0.04266714 | 12 | | | |
| Total | 1.160983 | 0.6916446 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.47 | 14.2 | 0.6943 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9545 | 0.8239 | 0.6326 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-017 | 6 | 0.4144 | 0.3448 | 0.4841 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 51.21% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1058-7699 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 2.795 | 1.761 | 14 | 0.1677 | 0.0072 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.735 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2833078 | 0.2833078 | 1 | 7.81 | 0.0143 | Significant Effect |
| Error | 0.5078193 | 0.03627281 | 14 | | | |
| Total | 0.7911271 | 0.3195806 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.11 | 8.885 | 0.3457 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9727 | 0.8408 | 0.8795 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-014 | 8 | 0.5834 | 0.5253 | 0.6415 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 31.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-9515-7749 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 52.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 1.74 | 1.895 | 7 | 0.4458 | 0.0627 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.538 | 2.215 | 0.9361 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1490595 | 0.1490595 | 1 | 3.028 | 0.1254 | Non-Significant Effect |
| Error | 0.3445358 | 0.0492194 | 7 | | | |
| Total | 0.4935953 | 0.1982789 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9738 | 0.7007 | 0.9249 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 48.2% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-0678-6353 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | -0.09902 | 1.761 | 14 | 0.2027 | 0.5387 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.253 | 2.586 | 0.2218 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0005194256 | 0.0005194256 | 1 | 0.009805 | 0.9225 | Non-Significant Effect |
| Error | 0.7416381 | 0.05297415 | 14 | | | |
| Total | 0.7421576 | 0.05349358 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.153 | 8.885 | 0.8562 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9592 | 0.8408 | 0.6478 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-011 | 8 | 0.8609 | 0.7703 | 0.9515 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | -1.34% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-5519-0602 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | 0.854 | 1.761 | 14 | 0.1689 | 0.2037 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.722 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02683424 | 0.02683424 | 1 | 0.7293 | 0.4075 | Non-Significant Effect |
| Error | 0.5150903 | 0.03679217 | 14 | | | |
| Total | 0.5419246 | 0.06362641 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.02 | 8.885 | 0.3740 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9691 | 0.8408 | 0.8241 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-013 | 8 | 0.7676 | 0.7082 | 0.827 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | 9.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-3544-8771 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 20.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | -0.2702 | 1.761 | 14 | 0.1778 | 0.6045 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.636 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.002976419 | 0.002976419 | 1 | 0.073 | 0.7910 | Non-Significant Effect |
| Error | 0.5708587 | 0.04077562 | 14 | | | |
| Total | 0.5738351 | 0.04375204 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.522 | 8.885 | 0.5929 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9585 | 0.8408 | 0.6340 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | -3.21% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-8858-4571 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | -1.997 | 1.761 | 14 | 0.1965 | 0.9672 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.85 | 2.586 | 0.8355 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1985111 | 0.1985111 | 1 | 3.987 | 0.0657 | Non-Significant Effect |
| Error | 0.6970416 | 0.04978869 | 14 | | | |
| Total | 0.8955527 | 0.2482998 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.023 | 8.885 | 0.9767 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.965 | 0.8408 | 0.7528 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-001 | 8 | 1.072 | 0.9869 | 1.158 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | -26.22% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-7871-8373 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 22.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | 1.161 | 1.761 | 14 | 0.1896 | 0.1325 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.939 | 2.586 | 0.6436 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.06251086 | 0.06251086 | 1 | 1.349 | 0.2649 | Non-Significant Effect |
| Error | 0.6488938 | 0.04634956 | 14 | | | |
| Total | 0.7114046 | 0.1088604 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.132 | 8.885 | 0.8743 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9698 | 0.8408 | 0.8353 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-002 | 8 | 0.7245 | 0.6452 | 0.8038 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | 14.72% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-8124-8864 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | 0.9007 | 1.761 | 14 | 0.2021 | 0.1915 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.03 | 2.586 | 0.4853 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04272731 | 0.04272731 | 1 | 0.8113 | 0.3830 | Non-Significant Effect |
| Error | 0.7373342 | 0.05266673 | 14 | | | |
| Total | 0.7800615 | 0.09539404 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.14 | 8.885 | 0.8671 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9631 | 0.8408 | 0.7187 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 0.0% |
| 19830-004 | 8 | 0.7462 | 0.656 | 0.8363 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | 12.17% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-1741-2422 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 12.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 6.984 | 1.761 | 14 | 0.1538 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.697 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.487672 | 1.487672 | 1 | 48.78 | <0.0001 | Significant Effect |
| Error | 0.4269531 | 0.03049665 | 14 | | | |
| Total | 1.914625 | 1.518168 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.615 | 8.885 | 0.5425 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9379 | 0.8408 | 0.3239 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-014 | 8 | 0.5834 | 0.5253 | 0.6415 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 51.11% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-5203-5163 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 11.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 11.76 | 1.761 | 14 | 0.1314 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.986 | 2.586 | 0.5584 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.079917 | 3.079917 | 1 | 138.2 | <0.0001 | Significant Effect |
| Error | 0.3118981 | 0.02227844 | 14 | | | |
| Total | 3.391815 | 3.102196 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.467 | 8.885 | 0.0394 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9663 | 0.8408 | 0.7763 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 73.54% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-2902-7424 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 11.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 11.41 | 1.761 | 14 | 0.1383 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.887 | 2.586 | 0.7503 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.211966 | 3.211966 | 1 | 130.2 | <0.0001 | Significant Effect |
| Error | 0.3453047 | 0.02466462 | 14 | | | |
| Total | 3.55727 | 3.23663 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.23 | 8.885 | 0.1447 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9492 | 0.8408 | 0.4767 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-016 | 8 | 0.2971 | 0.256 | 0.3382 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 75.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-0080-3122 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 7.608 | 1.782 | 12 | 0.1824 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.573 | 2.507 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.079458 | 2.079458 | 1 | 57.88 | <0.0001 | Significant Effect |
| Error | 0.4311394 | 0.03592828 | 12 | | | |
| Total | 2.510597 | 2.115386 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.125 | 14.2 | 0.9294 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9438 | 0.8239 | 0.4685 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-017 | 6 | 0.4144 | 0.3448 | 0.4841 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 65.27% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-3191-4083 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 32.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 3.659 | 1.895 | 7 | 0.39 | 0.0040 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.577 | 2.215 | 0.8408 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.504302 | 0.504302 | 1 | 13.39 | 0.0081 | Significant Effect |
| Error | 0.2636696 | 0.03766708 | 7 | | | |
| Total | 0.7679715 | 0.5419691 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9052 | 0.7007 | 0.2834 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 63.12% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-8385-9379 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 3.059 | 1.761 | 14 | 0.1913 | 0.0042 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.387 | 2.586 | 0.1286 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4417516 | 0.4417516 | 1 | 9.36 | 0.0085 | Significant Effect |
| Error | 0.6607719 | 0.04719799 | 14 | | | |
| Total | 1.102524 | 0.4889496 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.506 | 8.885 | 0.6023 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9283 | 0.8408 | 0.2288 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-011 | 8 | 0.8609 | 0.7703 | 0.9515 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | 27.85% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-9199-2800 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 13.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | 4.834 | 1.761 | 14 | 0.1551 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.683 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7246206 | 0.7246206 | 1 | 23.36 | 0.0003 | Significant Effect |
| Error | 0.4342241 | 0.03101601 | 14 | | | |
| Total | 1.158845 | 0.7556366 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.546 | 8.885 | 0.5795 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9405 | 0.8408 | 0.3556 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-013 | 8 | 0.7676 | 0.7082 | 0.827 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | 35.67% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-1306-2206 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 13.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 3.383 | 1.761 | 14 | 0.1648 | 0.0022 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.71 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.400535 | 0.400535 | 1 | 11.44 | 0.0045 | Significant Effect |
| Error | 0.4899925 | 0.03499946 | 14 | | | |
| Total | 0.8905275 | 0.4355344 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.165 | 8.885 | 0.8455 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9533 | 0.8408 | 0.5443 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 26.52% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-1630-6786 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | 3.298 | 1.761 | 14 | 0.1836 | 0.0026 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.585 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4725667 | 0.4725667 | 1 | 10.88 | 0.0053 | Significant Effect |
| Error | 0.6082053 | 0.04344324 | 14 | | | |
| Total | 1.080772 | 0.51601 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.307 | 8.885 | 0.7331 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9163 | 0.8408 | 0.1473 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 28.81% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-7179-3286 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 1.153 | 1.761 | 14 | 0.1848 | 0.1341 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.967 | 2.586 | 0.5914 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.05851033 | 0.05851033 | 1 | 1.329 | 0.2682 | Non-Significant Effect |
| Error | 0.6161754 | 0.04401253 | 14 | | | |
| Total | 0.6746857 | 0.1025229 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.337 | 8.885 | 0.7113 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9418 | 0.8408 | 0.3713 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-001 | 8 | 1.072 | 0.9869 | 1.158 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | 10.14% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-6755-3077 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 14.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | 4.654 | 1.761 | 14 | 0.1774 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.073 | 2.586 | 0.4221 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8788249 | 0.8788249 | 1 | 21.66 | 0.0004 | Significant Effect |
| Error | 0.5680276 | 0.0405734 | 14 | | | |
| Total | 1.446852 | 0.9193984 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.154 | 8.885 | 0.8547 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9616 | 0.8408 | 0.6913 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-002 | 8 | 0.7245 | 0.6452 | 0.8038 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | 39.28% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-1203-1000 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 4.129 | 1.761 | 14 | 0.1907 | 0.0005 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.152 | 2.586 | 0.3222 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7994877 | 0.7994877 | 1 | 17.05 | 0.0010 | Significant Effect |
| Error | 0.6564679 | 0.04689057 | 14 | | | |
| Total | 1.455956 | 0.8463783 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.49 | 8.885 | 0.6120 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9585 | 0.8408 | 0.6348 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 0.0% |
| 19830-004 | 8 | 0.7462 | 0.656 | 0.8363 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | 37.47% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-4064-1238 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 24.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 1.084 | 1.761 | 14 | 0.2434 | 0.1484 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.075 | 2.586 | 0.4195 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.08975258 | 0.08975258 | 1 | 1.175 | 0.2968 | Non-Significant Effect |
| Error | 1.06975 | 0.07641072 | 14 | | | |
| Total | 1.159503 | 0.1661633 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.694 | 8.885 | 0.5034 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9479 | 0.8408 | 0.4565 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-011 | 8 | 0.8609 | 0.7703 | 0.9515 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | 14.82% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-3958-5927 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 21.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | 1.981 | 1.761 | 14 | 0.2161 | 0.0338 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.337 | 2.586 | 0.1587 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2363806 | 0.2363806 | 1 | 3.925 | 0.0676 | Non-Significant Effect |
| Error | 0.8432023 | 0.06022874 | 14 | | | |
| Total | 1.079583 | 0.2966093 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.944 | 8.885 | 0.0907 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9733 | 0.8408 | 0.8887 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-013 | 8 | 0.7676 | 0.7082 | 0.827 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | 24.05% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0909-0589 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 21.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 3.498 | 1.761 | 14 | 0.2152 | 0.0018 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.347 | 2.586 | 0.1521 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7304179 | 0.7304179 | 1 | 12.23 | 0.0036 | Significant Effect |
| Error | 0.8359313 | 0.05970938 | 14 | | | |
| Total | 1.566349 | 0.7901273 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.12 | 8.885 | 0.0815 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9716 | 0.8408 | 0.8632 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-014 | 8 | 0.5834 | 0.5253 | 0.6415 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 42.28% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-4981-0175 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 21.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 6.125 | 1.895 | 7 | 0.215 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.527 | 2.586 | 0.0672 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.931857 | 1.931857 | 1 | 37.52 | <0.0001 | Significant Effect |
| Error | 0.7208763 | 0.05149116 | 14 | | | |
| Total | 2.652734 | 1.983348 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 13.95 | 8.885 | 0.0025 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9434 | 0.8408 | 0.3933 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 68.76% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-0979-3735 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 20.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 6.148 | 1.761 | 14 | 0.2044 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.471 | 2.586 | 0.0882 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.036726 | 2.036726 | 1 | 37.8 | <0.0001 | Significant Effect |
| Error | 0.754283 | 0.05387735 | 14 | | | |
| Total | 2.791009 | 2.090603 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.24 | 8.885 | 0.0125 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9547 | 0.8408 | 0.5677 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-016 | 8 | 0.2971 | 0.256 | 0.3382 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 70.6% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-5578-9911 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 25.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 4.173 | 1.782 | 12 | 0.2547 | 0.0006 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.179 | 2.507 | 0.2288 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.218939 | 1.218939 | 1 | 17.41 | 0.0013 | Significant Effect |
| Error | 0.8401176 | 0.0700098 | 12 | | | |
| Total | 2.059057 | 1.288949 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.869 | 14.2 | 0.2638 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9737 | 0.8239 | 0.9218 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-017 | 6 | 0.4144 | 0.3448 | 0.4841 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 58.99% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-9564-6135 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 61.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 1.736 | 1.895 | 7 | 0.6229 | 0.0631 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.911 | 2.215 | 0.2689 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2895009 | 0.2895009 | 1 | 3.013 | 0.1262 | Non-Significant Effect |
| Error | 0.6726478 | 0.09609254 | 7 | | | |
| Total | 0.9621487 | 0.3855934 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9815 | 0.7007 | 0.9716 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 56.47% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2997-8582 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 24.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | 1.918 | 1.761 | 14 | 0.2429 | 0.0379 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.079 | 2.586 | 0.4137 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.27993 | 0.27993 | 1 | 3.678 | 0.0758 | Non-Significant Effect |
| Error | 1.065446 | 0.0761033 | 14 | | | |
| Total | 1.345376 | 0.3560333 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.712 | 8.885 | 0.4947 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9687 | 0.8408 | 0.8173 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-004 | 8 | 0.7462 | 0.656 | 0.8363 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | 26.17% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2683-3232 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | 2.167 | 1.761 | 14 | 0.2326 | 0.0240 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.171 | 2.586 | 0.3007 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3276418 | 0.3276418 | 1 | 4.695 | 0.0480 | Significant Effect |
| Error | 0.9770057 | 0.06978612 | 14 | | | |
| Total | 1.304647 | 0.3974279 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.21 | 8.885 | 0.3173 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9789 | 0.8408 | 0.9542 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-002 | 8 | 0.7245 | 0.6452 | 0.8038 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | 28.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-5982-0733 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | -0.4552 | 1.761 | 14 | 0.2383 | 0.6720 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.119 | 2.586 | 0.3606 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01517025 | 0.01517025 | 1 | 0.2072 | 0.6560 | Non-Significant Effect |
| Error | 1.025154 | 0.07322526 | 14 | | | |
| Total | 1.040324 | 0.08839551 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.908 | 8.885 | 0.4133 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9771 | 0.8408 | 0.9368 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-001 | 8 | 1.072 | 0.9869 | 1.158 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | -6.09% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-5717-3470 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 22.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 1.057 | 1.761 | 14 | 0.2232 | 0.1542 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.263 | 2.586 | 0.2131 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.07172847 | 0.07172847 | 1 | 1.117 | 0.3085 | Non-Significant Effect |
| Error | 0.8989707 | 0.06421219 | 14 | | | |
| Total | 0.9706991 | 0.1359407 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.972 | 8.885 | 0.1740 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.98 | 0.8408 | 0.9635 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 13.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7202-3414 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | 1.196 | 1.761 | 14 | 0.2374 | 0.1258 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.128 | 2.586 | 0.3504 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1039277 | 0.1039277 | 1 | 1.43 | 0.2516 | Non-Significant Effect |
| Error | 1.017184 | 0.07265597 | 14 | | | |
| Total | 1.121111 | 0.1765837 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.952 | 8.885 | 0.3972 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9787 | 0.8408 | 0.9527 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 15.95% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-9246-8617 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 22.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.412 | 1.761 | 14 | 0.2277 | 0.9100 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.217 | 2.586 | 0.2535 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1332663 | 0.1332663 | 1 | 1.993 | 0.1799 | Non-Significant Effect |
| Error | 0.9363173 | 0.06687981 | 14 | | | |
| Total | 1.069584 | 0.2001462 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.551 | 8.885 | 0.2398 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9686 | 0.8408 | 0.8156 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 0.0% |
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | -18.06% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1470-9800 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 2.874 | 1.796 | 11 | 0.1583 | 0.0076 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.888 | 2.462 | 0.5609 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2074027 | 0.2074027 | 1 | 8.26 | 0.0151 | Significant Effect |
| Error | 0.2761998 | 0.02510907 | 11 | | | |
| Total | 0.4836025 | 0.2325118 | 12 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.848 | 11.46 | 0.4758 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9414 | 0.8138 | 0.4758 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-017 | 6 | 0.4144 | 0.3448 | 0.4841 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 37.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-2065-5262 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 5.919 | 1.771 | 13 | 0.1109 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.943 | 2.548 | 0.5817 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5129759 | 0.5129759 | 1 | 35.03 | <0.0001 | Significant Effect |
| Error | 0.1903651 | 0.01464347 | 13 | | | |
| Total | 0.703341 | 0.5276194 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.554 | 9.155 | 0.5751 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9294 | 0.8328 | 0.2677 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-016 | 8 | 0.2971 | 0.256 | 0.3382 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 55.51% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-0227-0977 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 6.191 | 1.771 | 13 | 0.1007 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.14 | 2.548 | 0.3012 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4627526 | 0.4627526 | 1 | 38.33 | <0.0001 | Significant Effect |
| Error | 0.1569585 | 0.01207373 | 13 | | | |
| Total | 0.6197111 | 0.4748263 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.63 | 9.155 | 0.2317 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9607 | 0.8328 | 0.7044 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 52.72% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-4178-6730 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 1.128 | 1.771 | 13 | 0.1326 | 0.1399 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.841 | 2.548 | 0.7871 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02661512 | 0.02661512 | 1 | 1.272 | 0.2798 | Non-Significant Effect |
| Error | 0.2720135 | 0.02092411 | 13 | | | |
| Total | 0.2986286 | 0.04753923 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.287 | 10.79 | 0.7742 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9628 | 0.8328 | 0.7412 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-014 | 8 | 0.5834 | 0.5253 | 0.6415 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 12.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-8018-1749 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 20.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -1.316 | 1.771 | 13 | 0.1343 | 0.8945 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.742 | 2.548 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03717955 | 0.03717955 | 1 | 1.731 | 0.2111 | Non-Significant Effect |
| Error | 0.2792845 | 0.02148342 | 13 | | | |
| Total | 0.316464 | 0.05866297 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.345 | 10.79 | 0.7342 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.94 | 0.8328 | 0.3821 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-013 | 8 | 0.7676 | 0.7082 | 0.827 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | -14.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-1732-8635 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 27.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -1.891 | 1.771 | 13 | 0.1808 | 0.9595 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.635 | 2.548 | 0.0307 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1392 | 0.1392 | 1 | 3.577 | 0.0811 | Non-Significant Effect |
| Error | 0.5058323 | 0.03891018 | 13 | | | |
| Total | 0.6450322 | 0.1781102 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.13 | 10.79 | 0.1856 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.921 | 0.8328 | 0.1997 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-011 | 8 | 0.8609 | 0.7703 | 0.9515 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | -28.91% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-9952-7513 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -3.664 | 1.782 | 12 | 0.1287 | 0.9984 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2451426 | 0.2451426 | 1 | 13.43 | 0.0032 | Significant Effect |
| Error | 0.2190892 | 0.01825743 | 12 | | | |
| Total | 0.4642318 | 0.2634 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.015 | 11.07 | 0.9861 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9544 | 0.8239 | 0.6301 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-011 | 7 | 0.9325 | 0.8809 | 0.984 | 0.7395 | 1.139 | 0.05126 | 0.1356 | 14.54% | -39.63% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-0873-3449 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 41.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 1.583 | 1.943 | 6 | 0.2796 | 0.0823 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.818 | 2.127 | 0.3036 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04540722 | 0.04540722 | 1 | 2.506 | 0.1645 | Non-Significant Effect |
| Error | 0.1087299 | 0.01812166 | 6 | | | |
| Total | 0.1541372 | 0.06352888 | 7 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9498 | 0.6451 | 0.7090 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 34.11% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-9028-2976 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 27.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | -0.7707 | 1.771 | 13 | 0.18 | 0.7727 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.378 | 2.548 | 0.1152 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.02291596 | 0.02291596 | 1 | 0.594 | 0.4547 | Non-Significant Effect |
| Error | 0.5015283 | 0.0385791 | 13 | | | |
| Total | 0.5244443 | 0.06149507 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.097 | 10.79 | 0.1897 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9306 | 0.8328 | 0.2790 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-004 | 8 | 0.7462 | 0.656 | 0.8363 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | -11.73% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-6775-6177 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 24.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -0.6145 | 1.771 | 13 | 0.1634 | 0.7252 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.348 | 2.548 | 0.1315 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0119975 | 0.0119975 | 1 | 0.3776 | 0.5495 | Non-Significant Effect |
| Error | 0.4130879 | 0.031776 | 13 | | | |
| Total | 0.4250854 | 0.04377349 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.399 | 10.79 | 0.3062 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9635 | 0.8328 | 0.7526 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-002 | 8 | 0.7245 | 0.6452 | 0.8038 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | -8.49% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-9381-5736 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 25.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -4.149 | 1.771 | 13 | 0.1726 | 0.9994 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.197 | 2.548 | 0.2439 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.610766 | 0.610766 | 1 | 17.21 | 0.0011 | Significant Effect |
| Error | 0.4612358 | 0.03547968 | 13 | | | |
| Total | 1.072002 | 0.6462457 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.779 | 10.79 | 0.2339 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9736 | 0.8328 | 0.9068 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-001 | 8 | 1.072 | 0.9869 | 1.158 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | -60.57% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-3605-1814 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 22.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | -2.515 | 1.771 | 13 | 0.1471 | 0.9871 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.997 | 2.548 | 0.4900 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1630412 | 0.1630412 | 1 | 6.326 | 0.0258 | Significant Effect |
| Error | 0.3350528 | 0.0257733 | 13 | | | |
| Total | 0.4980941 | 0.1888146 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.784 | 10.79 | 0.4978 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9764 | 0.8328 | 0.9392 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | -31.29% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8210-0696 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 25.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | -1.88 | 1.771 | 13 | 0.1711 | 0.9587 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.774 | 2.548 | 0.9492 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1232551 | 0.1232551 | 1 | 3.535 | 0.0827 | Non-Significant Effect |
| Error | 0.4532657 | 0.03486659 | 13 | | | |
| Total | 0.5765208 | 0.1581217 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.716 | 10.79 | 0.2442 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9829 | 0.8328 | 0.9856 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | -27.21% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-8961-0544 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 23.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | -5.998 | 1.771 | 13 | 0.1551 | 1.0000 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.756 | 2.548 | 0.9965 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.030636 | 1.030636 | 1 | 35.98 | <0.0001 | Significant Effect |
| Error | 0.3723995 | 0.02864611 | 13 | | | |
| Total | 1.403035 | 1.059282 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.079 | 10.79 | 0.3913 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9487 | 0.8328 | 0.5038 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | -78.68% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-9956-3778 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 33.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | -2.702 | 1.771 | 13 | 0.2247 | 0.9909 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.345 | 2.548 | 0.1333 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4389381 | 0.4389381 | 1 | 7.303 | 0.0181 | Significant Effect |
| Error | 0.7813777 | 0.06010598 | 13 | | | |
| Total | 1.220316 | 0.4990441 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.303 | 10.79 | 0.0592 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9699 | 0.8328 | 0.8559 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 0.0% |
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | -51.35% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-6708-5671 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 17.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 7.12 | 1.782 | 12 | 0.2196 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.211 | 2.507 | 0.2020 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.639001 | 2.639001 | 1 | 50.69 | <0.0001 | Significant Effect |
| Error | 0.6247466 | 0.05206222 | 12 | | | |
| Total | 3.263748 | 2.691063 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.95 | 14.2 | 0.4797 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9597 | 0.8239 | 0.7179 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-017 | 6 | 0.4144 | 0.3448 | 0.4841 | 0.2067 | 0.7009 | 0.07471 | 0.183 | 44.16% | 67.92% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-0121-7640 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 13.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 10.14 | 1.761 | 14 | 0.1728 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.557 | 2.586 | 0.0580 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.957249 | 3.957249 | 1 | 102.8 | <0.0001 | Significant Effect |
| Error | 0.5389119 | 0.03849371 | 14 | | | |
| Total | 4.496161 | 3.995743 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.601 | 8.885 | 0.0369 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9399 | 0.8408 | 0.3475 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-016 | 8 | 0.2971 | 0.256 | 0.3382 | 0.1683 | 0.45 | 0.03818 | 0.108 | 36.35% | 77.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-4520-7520 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 13.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 10.27 | 1.86 | 8 | 0.1767 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.64 | 2.586 | 0.0374 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.810527 | 3.810527 | 1 | 105.5 | <0.0001 | Significant Effect |
| Error | 0.5055053 | 0.03610752 | 14 | | | |
| Total | 4.316032 | 3.846635 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.481 | 8.885 | 0.0082 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9294 | 0.8408 | 0.2387 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 75.56% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-3355-1980 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 9.09% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 14.95 | 1.771 | 13 | 0.1238 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.078927 | 4.078927 | 1 | 223.7 | <0.0001 | Significant Effect |
| Error | 0.2370934 | 0.01823796 | 13 | | | |
| Total | 4.31602 | 4.097165 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.569 | 9.155 | 0.0667 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9753 | 0.8328 | 0.9276 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 7 | 1.361 | 1.294 | 1.428 | 1.059 | 1.603 | 0.06706 | 0.1774 | 13.04% | 0.0% |
| 19830-015 | 8 | 0.3157 | 0.2842 | 0.3473 | 0.2162 | 0.46 | 0.02935 | 0.083 | 26.29% | 76.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-9969-4987 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 14.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 6.729 | 1.761 | 14 | 0.1854 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.383 | 2.586 | 0.1308 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.007292 | 2.007292 | 1 | 45.29 | <0.0001 | Significant Effect |
| Error | 0.6205603 | 0.04432574 | 14 | | | |
| Total | 2.627852 | 2.051618 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.801 | 8.885 | 0.1977 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9561 | 0.8408 | 0.5926 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-014 | 8 | 0.5834 | 0.5253 | 0.6415 | 0.3533 | 0.84 | 0.054 | 0.1527 | 26.18% | 54.84% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-2310-9696 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 14.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | 4.95 | 1.761 | 14 | 0.1865 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.369 | 2.586 | 0.1387 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.099005 | 1.099005 | 1 | 24.51 | 0.0002 | Significant Effect |
| Error | 0.6278313 | 0.04484509 | 14 | | | |
| Total | 1.726836 | 1.14385 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.681 | 8.885 | 0.2166 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9646 | 0.8408 | 0.7454 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-013 | 8 | 0.7676 | 0.7082 | 0.827 | 0.5718 | 1.014 | 0.05519 | 0.1561 | 20.34% | 40.58% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4567-9262 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 3.488 | 1.761 | 14 | 0.2176 | 0.0018 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.099 | 2.586 | 0.3868 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7425817 | 0.7425817 | 1 | 12.17 | 0.0036 | Significant Effect |
| Error | 0.8543791 | 0.06102708 | 14 | | | |
| Total | 1.596961 | 0.8036088 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.152 | 8.885 | 0.8571 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8978 | 0.8408 | 0.0742 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-011 | 8 | 0.8609 | 0.7703 | 0.9515 | 0.36 | 1.139 | 0.08421 | 0.2382 | 27.67% | 33.35% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-1900-4179 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 39.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 3.142 | 1.895 | 7 | 0.5136 | 0.0082 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.027 | 2.215 | 0.1570 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.6448898 | 0.6448898 | 1 | 9.872 | 0.0163 | Significant Effect |
| Error | 0.4572768 | 0.06532525 | 7 | | | |
| Total | 1.102167 | 0.710215 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9341 | 0.7007 | 0.5212 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-005 | 1 | 0.44 | | | 0.44 | 0.44 | 0 | 0 | 0.0% | 65.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-5941-5601 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | 4.428 | 1.761 | 14 | 0.217 | 0.0003 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.036 | 2.586 | 0.4766 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.19078 | 1.19078 | 1 | 19.61 | 0.0006 | Significant Effect |
| Error | 0.8500751 | 0.06071965 | 14 | | | |
| Total | 2.040855 | 1.251499 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.164 | 8.885 | 0.8462 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9945 | 0.8408 | 1.0000 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-004 | 8 | 0.7462 | 0.656 | 0.8363 | 0.4767 | 1.196 | 0.08375 | 0.2369 | 31.75% | 42.24% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-0486-3295 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | 4.864 | 1.761 | 14 | 0.2054 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.151 | 2.586 | 0.3231 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.287191 | 1.287191 | 1 | 23.66 | 0.0003 | Significant Effect |
| Error | 0.7616348 | 0.05440248 | 14 | | | |
| Total | 2.048826 | 1.341594 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.502 | 8.885 | 0.6045 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9815 | 0.8408 | 0.9744 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-002 | 8 | 0.7245 | 0.6452 | 0.8038 | 0.4393 | 1.128 | 0.07372 | 0.2085 | 28.78% | 43.91% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-6366-2466 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 1.825 | 1.761 | 14 | 0.2118 | 0.0447 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.086 | 2.586 | 0.4041 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1927007 | 0.1927007 | 1 | 3.332 | 0.0894 | Non-Significant Effect |
| Error | 0.8097826 | 0.05784161 | 14 | | | |
| Total | 1.002483 | 0.2505423 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.297 | 8.885 | 0.7401 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9391 | 0.8408 | 0.3379 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-001 | 8 | 1.072 | 0.9869 | 1.158 | 0.6736 | 1.357 | 0.07934 | 0.2244 | 20.93% | 16.99% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-9205-4315 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 3.756 | 1.761 | 14 | 0.1946 | 0.0011 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.27 | 2.586 | 0.2073 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.6888438 | 0.6888438 | 1 | 14.11 | 0.0021 | Significant Effect |
| Error | 0.6835997 | 0.04882855 | 14 | | | |
| Total | 1.372443 | 0.7376724 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.02 | 8.885 | 0.3739 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9593 | 0.8408 | 0.6487 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-012 | 8 | 0.8768 | 0.8084 | 0.9452 | 0.6174 | 1.186 | 0.06357 | 0.1798 | 20.51% | 32.13% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-6477-7622 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 16.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 3.696 | 1.761 | 14 | 0.2108 | 0.0012 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.096 | 2.586 | 0.3903 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7823805 | 0.7823805 | 1 | 13.66 | 0.0024 | Significant Effect |
| Error | 0.8018125 | 0.05727233 | 14 | | | |
| Total | 1.584193 | 0.8396528 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.327 | 8.885 | 0.7182 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9464 | 0.8408 | 0.4343 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-010 | 8 | 0.8495 | 0.7651 | 0.9339 | 0.5357 | 1.169 | 0.07844 | 0.2219 | 26.12% | 34.24% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-6294-5517 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 15.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | 0.8685 | 1.761 | 14 | 0.1998 | 0.1999 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.211 | 2.586 | 0.2601 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03884361 | 0.03884361 | 1 | 0.7543 | 0.3998 | Non-Significant Effect |
| Error | 0.7209463 | 0.05149617 | 14 | | | |
| Total | 0.7597899 | 0.09033978 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.734 | 8.885 | 0.4847 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9247 | 0.8408 | 0.2004 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-009 | 8 | 1.193 | 1.119 | 1.267 | 0.9069 | 1.403 | 0.06862 | 0.1941 | 16.27% | 7.63% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-2918-9181 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 19.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 1.979 | 1.761 | 14 | 0.2502 | 0.0339 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.019 | 2.586 | 0.5036 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3160064 | 0.3160064 | 1 | 3.915 | 0.0679 | Non-Significant Effect |
| Error | 1.129925 | 0.08070889 | 14 | | | |
| Total | 1.445931 | 0.3967153 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.471 | 8.885 | 0.6233 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9561 | 0.8408 | 0.5920 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-008 | 8 | 1.011 | 0.8928 | 1.129 | 0.4567 | 1.446 | 0.1096 | 0.31 | 30.67% | 21.76% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2101-6111 | **Endpoint:** | Mean Dry Weight-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry weight-mg endpoint | 14.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 5.778 | 1.771 | 13 | 0.1912 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.41 | 2.548 | 0.0995 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.453489 | 1.453489 | 1 | 33.38 | <0.0001 | Significant Effect |
| Error | 0.5660067 | 0.04353898 | 13 | | | |
| Total | 2.019495 | 1.497028 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.605 | 10.79 | 0.1392 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9602 | 0.8328 | 0.6965 | Normal Distribution |

**Mean Dry Weight-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.292 | 1.195 | 1.389 | 0.8071 | 1.603 | 0.09036 | 0.2556 | 19.79% | 0.0% |
| 19830-003 | 7 | 0.6678 | 0.6166 | 0.719 | 0.5194 | 0.8944 | 0.05088 | 0.1346 | 20.16% | 48.3% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-7752-5348 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 26.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | 1.236 | 1.761 | 14 | 0.208 | 0.1185 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.747 | 2.586 | 0.0200 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.08519129 | 0.08519129 | 1 | 1.527 | 0.2369 | Non-Significant Effect |
| Error | 0.7812362 | 0.05580258 | 14 | | | |
| Total | 0.8664275 | 0.1409939 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.788 | 8.885 | 0.1995 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8889 | 0.8408 | 0.0535 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-011 | 8 | 0.6449 | 0.5359 | 0.7539 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | 18.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-5571-8295 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | 0.6816 | 1.771 | 13 | 0.1465 | 0.2537 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01186891 | 0.01186891 | 1 | 0.4646 | 0.5075 | Non-Significant Effect |
| Error | 0.332125 | 0.02554808 | 13 | | | |
| Total | 0.3439939 | 0.03741699 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.404 | 10.79 | 0.6950 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9103 | 0.8328 | 0.1366 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-011 | 7 | 0.7344 | 0.6793 | 0.7895 | 0.55 | 1.018 | 0.05475 | 0.1448 | 19.72% | 7.13% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-2676-3295 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 1.371 | 1.761 | 14 | 0.1603 | 0.0960 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.909 | 2.586 | 0.7036 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.06225049 | 0.06225049 | 1 | 1.88 | 0.1920 | Non-Significant Effect |
| Error | 0.4636661 | 0.03311901 | 14 | | | |
| Total | 0.5259166 | 0.0953695 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.248 | 8.885 | 0.7774 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9636 | 0.8408 | 0.7270 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 15.77% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-2515-7721 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 4.236 | 1.761 | 14 | 0.1549 | 0.0004 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.15 | 2.586 | 0.3236 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5550254 | 0.5550254 | 1 | 17.95 | 0.0008 | Significant Effect |
| Error | 0.4329686 | 0.03092633 | 14 | | | |
| Total | 0.987994 | 0.5859517 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.099 | 8.885 | 0.9038 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9865 | 0.8408 | 0.9949 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 47.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-5772-2887 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 15.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 9.108 | 1.761 | 14 | 0.1191 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.57 | 2.586 | 0.0543 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.516593 | 1.516593 | 1 | 82.96 | <0.0001 | Significant Effect |
| Error | 0.2559375 | 0.01828125 | 14 | | | |
| Total | 1.772531 | 1.534875 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.15 | 8.885 | 0.0800 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9397 | 0.8408 | 0.3453 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 77.86% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-9333-7098 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 14.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 10.57 | 1.761 | 14 | 0.1143 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.677 | 2.586 | 0.0303 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.882729 | 1.882729 | 1 | 111.8 | <0.0001 | Significant Effect |
| Error | 0.2358529 | 0.01684663 | 14 | | | |
| Total | 2.118582 | 1.899575 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.966 | 8.885 | 0.0202 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9144 | 0.8408 | 0.1373 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 86.75% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-2850-9353 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 11.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 13.59 | 1.771 | 13 | 0.08318 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.520143 | 1.520143 | 1 | 184.6 | <0.0001 | Significant Effect |
| Error | 0.107069 | 0.00823608 | 13 | | | |
| Total | 1.627212 | 1.528379 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.052 | 9.155 | 0.1702 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9551 | 0.8328 | 0.6076 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.7429 | 0.6996 | 0.7861 | 0.5865 | 0.8705 | 0.04295 | 0.1136 | 15.3% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 85.9% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-5220-6610 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 8.035 | 1.761 | 14 | 0.1449 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.112 | 2.586 | 0.3703 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.748347 | 1.748347 | 1 | 64.57 | <0.0001 | Significant Effect |
| Error | 0.3790984 | 0.02707846 | 14 | | | |
| Total | 2.127445 | 1.775425 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.193 | 8.885 | 0.8217 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9168 | 0.8408 | 0.1495 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 83.6% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-8532-5216 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 25.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | -0.8388 | 1.761 | 14 | 0.1993 | 0.7922 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.894 | 2.586 | 0.7351 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03605244 | 0.03605244 | 1 | 0.7037 | 0.4157 | Non-Significant Effect |
| Error | 0.7173041 | 0.05123601 | 14 | | | |
| Total | 0.7533566 | 0.08728845 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.478 | 8.885 | 0.2542 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9647 | 0.8408 | 0.7471 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-001 | 8 | 0.8858 | 0.783 | 0.9885 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | -12.01% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-1761-8558 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 2.553 | 1.761 | 14 | 0.1486 | 0.0115 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.06 | 2.586 | 0.4405 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1854387 | 0.1854387 | 1 | 6.517 | 0.0230 | Significant Effect |
| Error | 0.3983505 | 0.02845361 | 14 | | | |
| Total | 0.5837892 | 0.2138923 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.074 | 8.885 | 0.9278 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.969 | 0.8408 | 0.8222 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 27.23% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-4255-4090 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 1.55 | 1.761 | 14 | 0.1676 | 0.0718 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.826 | 2.586 | 0.8919 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.08695157 | 0.08695157 | 1 | 2.402 | 0.1435 | Non-Significant Effect |
| Error | 0.5068715 | 0.03620511 | 14 | | | |
| Total | 0.5938231 | 0.1231567 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.458 | 8.885 | 0.6315 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9247 | 0.8408 | 0.2006 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-004 | 8 | 0.6434 | 0.5645 | 0.7222 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | 18.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-1925-5126 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 13.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.86 | 2.586 | 0.0095 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.484172 | 2.484172 | 1 | 168.3 | <0.0001 | Significant Effect |
| Error | 0.2066683 | 0.01476202 | 14 | | | |
| Total | 2.69084 | 2.498934 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 487 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7837 | 0.8408 | 0.0017 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.65% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-9315-4274 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 11.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 17.2 | 1.943 | 6 | 0.08362 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.044967 | 2.044967 | 1 | 341.3 | <0.0001 | Significant Effect |
| Error | 0.07788446 | 0.005991112 | 13 | | | |
| Total | 2.122852 | 2.050958 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 213.4 | 9.155 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8849 | 0.8328 | 0.0563 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.7429 | 0.6996 | 0.7861 | 0.5865 | 0.8705 | 0.04295 | 0.1136 | 15.3% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.63% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-4388-3830 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 13.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.863 | 2.586 | 0.0093 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.501539 | 2.501539 | 1 | 169.8 | <0.0001 | Significant Effect |
| Error | 0.2062448 | 0.01473177 | 14 | | | |
| Total | 2.707784 | 2.516271 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.747 | 8.862 | 0.0104 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7691 | 0.8408 | 0.0011 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-5873-2344 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 11.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-006 | 17.3 | 1.943 | 6 | 0.08345 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.060192 | 2.060192 | 1 | 345.8 | <0.0001 | Significant Effect |
| Error | 0.07746095 | 0.005958535 | 13 | | | |
| Total | 2.137653 | 2.066151 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 15.3 | 9.33 | 0.0021 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8662 | 0.8328 | 0.0297 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.7429 | 0.6996 | 0.7861 | 0.5865 | 0.8705 | 0.04295 | 0.1136 | 15.3% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7878-7960 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 13.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.863 | 2.586 | 0.0093 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.501539 | 2.501539 | 1 | 169.8 | <0.0001 | Significant Effect |
| Error | 0.2062448 | 0.01473177 | 14 | | | |
| Total | 2.707784 | 2.516271 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.747 | 8.862 | 0.0104 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7691 | 0.8408 | 0.0011 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2902-9170 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 11.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-007 | 17.3 | 1.943 | 6 | 0.08345 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.060192 | 2.060192 | 1 | 345.8 | <0.0001 | Significant Effect |
| Error | 0.07746095 | 0.005958535 | 13 | | | |
| Total | 2.137653 | 2.066151 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 15.3 | 9.33 | 0.0021 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8662 | 0.8328 | 0.0297 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.7429 | 0.6996 | 0.7861 | 0.5865 | 0.8705 | 0.04295 | 0.1136 | 15.3% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-7269-2993 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 26.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 5.148 | 1.86 | 8 | 0.18 | 0.0004 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.598 | 2.586 | 0.0469 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9934394 | 0.9934394 | 1 | 26.5 | 0.0001 | Significant Effect |
| Error | 0.5247615 | 0.03748296 | 14 | | | |
| Total | 1.518201 | 1.030922 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.56 | 8.885 | 0.0080 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9307 | 0.8408 | 0.2497 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 74.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-3171-4868 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 17.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 7.834 | 1.771 | 13 | 0.1283 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.203506 | 1.203506 | 1 | 61.38 | <0.0001 | Significant Effect |
| Error | 0.2549123 | 0.01960864 | 13 | | | |
| Total | 1.458418 | 1.223114 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.818 | 9.155 | 0.0584 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9463 | 0.8328 | 0.4688 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.7428 | 0.6725 | 0.8132 | 0.438 | 0.9315 | 0.0699 | 0.1849 | 24.9% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 76.43% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-9682-0213 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 26.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 5.99 | 1.895 | 7 | 0.1799 | 0.0003 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.649 | 2.586 | 0.0355 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.293541 | 1.293541 | 1 | 35.88 | <0.0001 | Significant Effect |
| Error | 0.5046768 | 0.03604835 | 14 | | | |
| Total | 1.798218 | 1.329589 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 16.05 | 8.885 | 0.0016 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9272 | 0.8408 | 0.2197 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 84.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-1723-5768 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 16.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 9.173 | 1.771 | 13 | 0.1232 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.520045 | 1.520045 | 1 | 84.15 | <0.0001 | Significant Effect |
| Error | 0.2348277 | 0.01806367 | 13 | | | |
| Total | 1.754873 | 1.538108 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.086 | 9.155 | 0.0143 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9419 | 0.8328 | 0.4067 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.7428 | 0.6725 | 0.8132 | 0.438 | 0.9315 | 0.0699 | 0.1849 | 24.9% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 85.9% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-5573-5395 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 28.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 5.055 | 1.761 | 14 | 0.1895 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.338 | 2.586 | 0.1578 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.182579 | 1.182579 | 1 | 25.55 | 0.0002 | Significant Effect |
| Error | 0.6479224 | 0.04628017 | 14 | | | |
| Total | 1.830501 | 1.228859 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.748 | 8.885 | 0.2056 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9233 | 0.8408 | 0.1903 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 80.74% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-0564-3470 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 29.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 2.279 | 1.761 | 14 | 0.1972 | 0.0194 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.246 | 2.586 | 0.2271 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2603185 | 0.2603185 | 1 | 5.193 | 0.0389 | Significant Effect |
| Error | 0.7017925 | 0.05012804 | 14 | | | |
| Total | 0.9621111 | 0.3104466 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.095 | 8.885 | 0.3502 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9119 | 0.8408 | 0.1251 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 37.88% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4284-9305 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 25.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 7.278 | 1.895 | 7 | 0.1746 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.729 | 2.586 | 0.0223 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.799191 | 1.799191 | 1 | 52.97 | <0.0001 | Significant Effect |
| Error | 0.4754923 | 0.03396373 | 14 | | | |
| Total | 2.274684 | 1.833155 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1122 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8613 | 0.8408 | 0.0201 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.59% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-0219-3894 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 15.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.044853 | 2.044853 | 1 | 129.3 | <0.0001 | Significant Effect |
| Error | 0.2056431 | 0.0158187 | 13 | | | |
| Total | 2.250496 | 2.060672 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 565.3 | 9.155 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8255 | 0.8328 | 0.0080 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.7428 | 0.6725 | 0.8132 | 0.438 | 0.9315 | 0.0699 | 0.1849 | 24.9% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.63% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-9270-7500 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 24.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 7.311 | 1.761 | 14 | 0.1622 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.73 | 2.586 | 0.0221 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.813977 | 1.813977 | 1 | 53.46 | <0.0001 | Significant Effect |
| Error | 0.4750687 | 0.03393348 | 14 | | | |
| Total | 2.289045 | 1.84791 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.807 | 8.862 | 0.0102 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8537 | 0.8408 | 0.0154 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-2244-2030 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 35.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | 0.2085 | 1.761 | 14 | 0.2412 | 0.4189 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.369 | 2.586 | 0.1384 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.003259196 | 0.003259196 | 1 | 0.04345 | 0.8379 | Non-Significant Effect |
| Error | 1.05006 | 0.07500429 | 14 | | | |
| Total | 1.053319 | 0.07826349 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.21 | 8.885 | 0.8076 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8984 | 0.8408 | 0.0756 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-011 | 8 | 0.6449 | 0.5359 | 0.7539 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | 4.24% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-1015-4703 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 15.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-006 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.060078 | 2.060078 | 1 | 130.5 | <0.0001 | Significant Effect |
| Error | 0.2052196 | 0.01578613 | 13 | | | |
| Total | 2.265297 | 2.075864 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 11.64 | 9.33 | 0.0052 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8132 | 0.8328 | 0.0055 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.7428 | 0.6725 | 0.8132 | 0.438 | 0.9315 | 0.0699 | 0.1849 | 24.9% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-1593-7671 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 24.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 7.311 | 1.761 | 14 | 0.1622 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.73 | 2.586 | 0.0221 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.813977 | 1.813977 | 1 | 53.46 | <0.0001 | Significant Effect |
| Error | 0.4750687 | 0.03393348 | 14 | | | |
| Total | 2.289045 | 1.84791 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.807 | 8.862 | 0.0102 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8537 | 0.8408 | 0.0154 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-1594-1932 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 15.5% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-007 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.060078 | 2.060078 | 1 | 130.5 | <0.0001 | Significant Effect |
| Error | 0.2052196 | 0.01578613 | 13 | | | |
| Total | 2.265297 | 2.075864 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 11.64 | 9.33 | 0.0052 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8132 | 0.8328 | 0.0055 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 7 | 0.7428 | 0.6725 | 0.8132 | 0.438 | 0.9315 | 0.0699 | 0.1849 | 24.9% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-6672-6523 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 29.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | 0.06433 | 1.761 | 14 | 0.2014 | 0.4748 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.199 | 2.586 | 0.2715 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0002165131 | 0.0002165131 | 1 | 0.004138 | 0.9496 | Non-Significant Effect |
| Error | 0.7324901 | 0.05232072 | 14 | | | |
| Total | 0.7327066 | 0.05253724 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.845 | 8.885 | 0.4375 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9456 | 0.8408 | 0.4231 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 1.09% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-5962-9777 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 28.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | -1.064 | 1.761 | 14 | 0.1943 | 0.8474 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.28 | 2.586 | 0.1994 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.05512451 | 0.05512451 | 1 | 1.133 | 0.3052 | Non-Significant Effect |
| Error | 0.6813135 | 0.04866525 | 14 | | | |
| Total | 0.736438 | 0.1037898 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.303 | 8.885 | 0.2933 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9713 | 0.8408 | 0.8596 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | -17.43% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-0389-8972 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 34.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | -1.6 | 1.761 | 14 | 0.2337 | 0.9341 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.895 | 2.586 | 0.7334 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1803369 | 0.1803369 | 1 | 2.56 | 0.1319 | Non-Significant Effect |
| Error | 0.9861281 | 0.07043772 | 14 | | | |
| Total | 1.166465 | 0.2507746 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.076 | 8.885 | 0.9257 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8607 | 0.8408 | 0.0197 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-001 | 8 | 0.8858 | 0.783 | 0.9885 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | -31.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-1345-6078 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 28.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | 0.8971 | 1.761 | 14 | 0.1922 | 0.1924 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.304 | 2.586 | 0.1813 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03835323 | 0.03835323 | 1 | 0.8048 | 0.3848 | Non-Significant Effect |
| Error | 0.6671745 | 0.04765532 | 14 | | | |
| Total | 0.7055277 | 0.08600855 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.473 | 8.885 | 0.2552 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9198 | 0.8408 | 0.1674 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 14.54% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-8190-1632 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 30.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | 0.2553 | 1.761 | 14 | 0.2073 | 0.4011 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.137 | 2.586 | 0.3393 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.003610739 | 0.003610739 | 1 | 0.06517 | 0.8022 | Non-Significant Effect |
| Error | 0.7756955 | 0.05540682 | 14 | | | |
| Total | 0.7793062 | 0.05901756 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.58 | 8.885 | 0.5607 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9625 | 0.8408 | 0.7081 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 0.0% |
| 19830-004 | 8 | 0.6434 | 0.5645 | 0.7222 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | 4.46% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-9702-9365 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 14.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 7.376 | 1.761 | 14 | 0.1619 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.088 | 2.586 | 0.4013 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.83888 | 1.83888 | 1 | 54.4 | <0.0001 | Significant Effect |
| Error | 0.4732279 | 0.033802 | 14 | | | |
| Total | 2.312108 | 1.872682 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.087 | 8.885 | 0.9150 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9089 | 0.8408 | 0.1119 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 61.84% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-2792-0269 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 11.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 12.67 | 1.761 | 14 | 0.1281 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.639 | 2.586 | 0.0376 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.395003 | 3.395003 | 1 | 160.5 | <0.0001 | Significant Effect |
| Error | 0.2961968 | 0.02115692 | 14 | | | |
| Total | 3.6912 | 3.41616 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.961 | 8.885 | 0.0509 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9325 | 0.8408 | 0.2672 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 84.03% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-5514-1367 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 8.25% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 18.2 | 1.771 | 13 | 0.09478 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.543569 | 3.543569 | 1 | 331.3 | <0.0001 | Significant Effect |
| Error | 0.1390289 | 0.01069453 | 13 | | | |
| Total | 3.682598 | 3.554264 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.097 | 9.155 | 0.3549 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9779 | 0.8328 | 0.9530 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 7 | 1.149 | 1.103 | 1.196 | 0.9857 | 1.332 | 0.04612 | 0.122 | 10.62% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 84.77% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3856-8672 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 11.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 14.12 | 1.761 | 14 | 0.1237 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.733 | 2.586 | 0.0218 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.932997 | 3.932997 | 1 | 199.4 | <0.0001 | Significant Effect |
| Error | 0.2761122 | 0.0197223 | 14 | | | |
| Total | 4.209109 | 3.952719 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.326 | 8.885 | 0.0121 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9175 | 0.8408 | 0.1536 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 90.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-0383-2455 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 7.63% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 21.1 | 1.771 | 13 | 0.08767 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.073511 | 4.073511 | 1 | 445.2 | <0.0001 | Significant Effect |
| Error | 0.1189443 | 0.009149562 | 13 | | | |
| Total | 4.192455 | 4.08266 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.52 | 9.155 | 0.1242 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9845 | 0.8328 | 0.9912 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 7 | 1.149 | 1.103 | 1.196 | 0.9857 | 1.332 | 0.04612 | 0.122 | 10.62% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 90.89% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-3756-9785 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 13.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 11.17 | 1.761 | 14 | 0.1524 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.218 | 2.586 | 0.2531 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.737662 | 3.737662 | 1 | 124.8 | <0.0001 | Significant Effect |
| Error | 0.4193578 | 0.02995413 | 14 | | | |
| Total | 4.15702 | 3.767617 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.426 | 8.885 | 0.6513 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9405 | 0.8408 | 0.3554 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 88.17% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-5419-1666 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 10.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.89 | 2.586 | 0.0076 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.78375 | 4.78375 | 1 | 271.2 | <0.0001 | Significant Effect |
| Error | 0.2469276 | 0.01763769 | 14 | | | |
| Total | 5.030677 | 4.801387 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 582.1 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8335 | 0.8408 | 0.0079 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.75% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-9344-1735 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 7.81% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 24.82 | 1.943 | 6 | 0.08978 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.907893 | 4.907893 | 1 | 710.8 | <0.0001 | Significant Effect |
| Error | 0.08975971 | 0.006904594 | 13 | | | |
| Total | 4.997653 | 4.914798 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 246.1 | 9.155 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8627 | 0.8328 | 0.0264 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 7 | 1.149 | 1.103 | 1.196 | 0.9857 | 1.332 | 0.04612 | 0.122 | 10.62% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.76% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3168-0603 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 10.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.893 | 2.586 | 0.0075 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.807839 | 4.807839 | 1 | 273.1 | <0.0001 | Significant Effect |
| Error | 0.2465041 | 0.01760744 | 14 | | | |
| Total | 5.054343 | 4.825446 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.901 | 8.862 | 0.0099 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8232 | 0.8408 | 0.0056 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-2826-6424 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 7.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-006 | 24.92 | 1.943 | 6 | 0.08962 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.931465 | 4.931465 | 1 | 717.6 | <0.0001 | Significant Effect |
| Error | 0.08933622 | 0.006872016 | 13 | | | |
| Total | 5.020801 | 4.938337 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 17.92 | 9.33 | 0.0012 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8452 | 0.8328 | 0.0148 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 7 | 1.149 | 1.103 | 1.196 | 0.9857 | 1.332 | 0.04612 | 0.122 | 10.62% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-3369-6491 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 10.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.893 | 2.586 | 0.0075 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.807839 | 4.807839 | 1 | 273.1 | <0.0001 | Significant Effect |
| Error | 0.2465041 | 0.01760744 | 14 | | | |
| Total | 5.054343 | 4.825446 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.901 | 8.862 | 0.0099 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8232 | 0.8408 | 0.0056 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-7980-3003 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 7.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-007 | 24.92 | 1.943 | 6 | 0.08962 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.931465 | 4.931465 | 1 | 717.6 | <0.0001 | Significant Effect |
| Error | 0.08933622 | 0.006872016 | 13 | | | |
| Total | 5.020801 | 4.938337 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 17.92 | 9.33 | 0.0012 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8452 | 0.8328 | 0.0148 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 7 | 1.149 | 1.103 | 1.196 | 0.9857 | 1.332 | 0.04612 | 0.122 | 10.62% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-8082-9296 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 3.727 | 1.761 | 14 | 0.2133 | 0.0011 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.679 | 2.586 | 0.0301 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8152797 | 0.8152797 | 1 | 13.89 | 0.0023 | Significant Effect |
| Error | 0.8214955 | 0.05867825 | 14 | | | |
| Total | 1.636775 | 0.873958 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.333 | 8.885 | 0.2863 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8814 | 0.8408 | 0.0408 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-011 | 8 | 0.6449 | 0.5359 | 0.7539 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | 41.18% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-3101-1486 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 14.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 4.132 | 1.771 | 13 | 0.1551 | 0.0006 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4889894 | 0.4889894 | 1 | 17.07 | 0.0012 | Significant Effect |
| Error | 0.3723844 | 0.02864495 | 13 | | | |
| Total | 0.8613738 | 0.5176344 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.678 | 10.79 | 0.5448 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9723 | 0.8328 | 0.8903 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-011 | 7 | 0.7344 | 0.6793 | 0.7895 | 0.55 | 1.018 | 0.05475 | 0.1448 | 19.72% | 33.01% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-9632-3466 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 15.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | 4.536 | 1.761 | 14 | 0.1671 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.023 | 2.586 | 0.4961 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7405522 | 0.7405522 | 1 | 20.57 | 0.0005 | Significant Effect |
| Error | 0.5039255 | 0.03599468 | 14 | | | |
| Total | 1.244478 | 0.7765468 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.044 | 8.885 | 0.9559 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9797 | 0.8408 | 0.9613 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 39.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-0303-3094 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 14.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 3.398 | 1.761 | 14 | 0.1584 | 0.0022 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.135 | 2.586 | 0.3420 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3733857 | 0.3733857 | 1 | 11.55 | 0.0043 | Significant Effect |
| Error | 0.4527489 | 0.03233921 | 14 | | | |
| Total | 0.8261346 | 0.4057249 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.195 | 8.885 | 0.8200 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9823 | 0.8408 | 0.9790 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 27.87% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-5299-6593 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | 3.726 | 1.761 | 14 | 0.1999 | 0.0011 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.215 | 2.586 | 0.2554 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7154437 | 0.7154437 | 1 | 13.88 | 0.0023 | Significant Effect |
| Error | 0.7215729 | 0.05154092 | 14 | | | |
| Total | 1.437016 | 0.7669846 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.927 | 8.885 | 0.4063 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9121 | 0.8408 | 0.1257 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 38.58% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-0761-2841 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 1.811 | 1.761 | 14 | 0.2049 | 0.0459 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.843 | 2.586 | 0.8503 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.177391 | 0.177391 | 1 | 3.278 | 0.0917 | Non-Significant Effect |
| Error | 0.7575635 | 0.05411167 | 14 | | | |
| Total | 0.9349545 | 0.2315027 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.073 | 8.885 | 0.3570 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8889 | 0.8408 | 0.0535 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-001 | 8 | 0.8858 | 0.783 | 0.9885 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | 19.21% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-6862-2253 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 14.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | 5.885 | 1.761 | 14 | 0.1559 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.169 | 2.586 | 0.3031 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.085095 | 1.085095 | 1 | 34.64 | <0.0001 | Significant Effect |
| Error | 0.4386098 | 0.03132927 | 14 | | | |
| Total | 1.523705 | 1.116424 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.283 | 8.885 | 0.7506 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9552 | 0.8408 | 0.5762 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 47.51% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-8140-3941 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 15.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 4.583 | 1.761 | 14 | 0.1741 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.942 | 2.586 | 0.6390 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8207064 | 0.8207064 | 1 | 21 | 0.0004 | Significant Effect |
| Error | 0.5471309 | 0.03908078 | 14 | | | |
| Total | 1.367837 | 0.8597872 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.22 | 8.885 | 0.8001 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9709 | 0.8408 | 0.8528 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | 0.0% |
| 19830-004 | 8 | 0.6434 | 0.5645 | 0.7222 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | 41.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-3979-0435 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 36.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 0.9336 | 1.761 | 14 | 0.2873 | 0.1832 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.312 | 2.586 | 0.1758 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.09279636 | 0.09279636 | 1 | 0.8717 | 0.3663 | Non-Significant Effect |
| Error | 1.490406 | 0.1064575 | 14 | | | |
| Total | 1.583202 | 0.1992539 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.592 | 8.885 | 0.5544 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8702 | 0.8408 | 0.0274 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-011 | 8 | 0.6449 | 0.5359 | 0.7539 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | 19.11% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-0897-3965 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 32.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | 0.9061 | 1.761 | 14 | 0.2549 | 0.1901 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.606 | 2.586 | 0.0449 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.06877504 | 0.06877504 | 1 | 0.821 | 0.3802 | Non-Significant Effect |
| Error | 1.172835 | 0.08377396 | 14 | | | |
| Total | 1.241611 | 0.152549 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.556 | 8.885 | 0.1160 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.922 | 0.8408 | 0.1813 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 16.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-8973-7238 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | 2.178 | 1.771 | 13 | 0.1912 | 0.0242 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.206565 | 0.206565 | 1 | 4.744 | 0.0484 | Significant Effect |
| Error | 0.5659958 | 0.04353814 | 13 | | | |
| Total | 0.7725608 | 0.2501032 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.398 | 9.155 | 0.6660 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9305 | 0.8328 | 0.2780 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 26.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-6820-2125 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 2.653 | 1.761 | 14 | 0.2515 | 0.0095 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.641 | 2.586 | 0.0372 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5741847 | 0.5741847 | 1 | 7.038 | 0.0189 | Significant Effect |
| Error | 1.142138 | 0.08158128 | 14 | | | |
| Total | 1.716323 | 0.655766 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.038 | 8.885 | 0.0856 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9198 | 0.8408 | 0.1674 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 47.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-5312-8729 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 4.599 | 1.771 | 13 | 0.186 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8708483 | 0.8708483 | 1 | 21.15 | 0.0005 | Significant Effect |
| Error | 0.5352982 | 0.04117679 | 13 | | | |
| Total | 1.406147 | 0.9120251 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.588 | 9.155 | 0.5572 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.93 | 0.8328 | 0.2730 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 53.59% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-8595-0124 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 4.739 | 1.895 | 7 | 0.2487 | 0.0011 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.873 | 2.586 | 0.0086 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.548158 | 1.548158 | 1 | 22.46 | 0.0003 | Significant Effect |
| Error | 0.9651068 | 0.06893621 | 14 | | | |
| Total | 2.513265 | 1.617094 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 18.42 | 8.885 | 0.0010 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8723 | 0.8408 | 0.0295 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 78.04% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7051-1225 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 16.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 8.453 | 1.771 | 13 | 0.1522 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.96896 | 1.96896 | 1 | 71.45 | <0.0001 | Significant Effect |
| Error | 0.3582672 | 0.02755901 | 13 | | | |
| Total | 2.327227 | 1.996519 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 7.245 | 9.155 | 0.0196 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.973 | 0.8328 | 0.8996 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 80.58% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-0595-2971 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 30.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 5.33 | 1.895 | 7 | 0.2461 | 0.0005 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.903 | 2.586 | 0.0069 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.917879 | 1.917879 | 1 | 28.41 | 0.0001 | Significant Effect |
| Error | 0.9450222 | 0.06750159 | 14 | | | |
| Total | 2.862901 | 1.985381 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 30.92 | 8.885 | 0.0002 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8588 | 0.8408 | 0.0184 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 86.86% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-5939-2883 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 30.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 4.788 | 1.761 | 14 | 0.2455 | 0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.705 | 2.586 | 0.0257 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.782225 | 1.782225 | 1 | 22.93 | 0.0003 | Significant Effect |
| Error | 1.088268 | 0.07773341 | 14 | | | |
| Total | 2.870493 | 1.859959 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.296 | 8.885 | 0.0429 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8897 | 0.8408 | 0.0550 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 83.73% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-5615-1912 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 7.747 | 1.771 | 13 | 0.1764 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.222691 | 2.222691 | 1 | 60.02 | <0.0001 | Significant Effect |
| Error | 0.4814281 | 0.03703293 | 13 | | | |
| Total | 2.704119 | 2.259724 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.083 | 9.155 | 0.3594 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9075 | 0.8328 | 0.1240 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 85.61% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-8766-3870 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 28.2% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.95 | 2.586 | 0.0048 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.542032 | 2.542032 | 1 | 38.88 | <0.0001 | Significant Effect |
| Error | 0.9154141 | 0.06538672 | 14 | | | |
| Total | 3.457446 | 2.607419 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 9.024 | 8.862 | 0.0095 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7888 | 0.8408 | 0.0019 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-3022-2007 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-007 | 10.51 | 1.943 | 6 | 0.1666 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.032646 | 3.032646 | 1 | 127.8 | <0.0001 | Significant Effect |
| Error | 0.3085744 | 0.02373649 | 13 | | | |
| Total | 3.34122 | 3.056382 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 33.01 | 9.33 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8566 | 0.8328 | 0.0216 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-1056-0081 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 28.2% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.95 | 2.586 | 0.0048 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.542032 | 2.542032 | 1 | 38.88 | <0.0001 | Significant Effect |
| Error | 0.9154141 | 0.06538672 | 14 | | | |
| Total | 3.457446 | 2.607419 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 9.024 | 8.862 | 0.0095 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7888 | 0.8408 | 0.0019 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-3439-5477 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-006 | 10.51 | 1.943 | 6 | 0.1666 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.032646 | 3.032646 | 1 | 127.8 | <0.0001 | Significant Effect |
| Error | 0.3085744 | 0.02373649 | 13 | | | |
| Total | 3.34122 | 3.056382 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 33.01 | 9.33 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8566 | 0.8328 | 0.0216 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-7144-9523 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 28.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.949 | 2.586 | 0.0048 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.524524 | 2.524524 | 1 | 38.59 | <0.0001 | Significant Effect |
| Error | 0.9158376 | 0.06541698 | 14 | | | |
| Total | 3.440361 | 2.589941 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2162 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7943 | 0.8408 | 0.0023 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.66% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0198-8434 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 10.48 | 1.943 | 6 | 0.1666 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.014168 | 3.014168 | 1 | 126.8 | <0.0001 | Significant Effect |
| Error | 0.3089979 | 0.02376907 | 13 | | | |
| Total | 3.323165 | 3.037937 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 850.1 | 9.155 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8675 | 0.8328 | 0.0310 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-7511-5356 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 32.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | 1.044 | 1.761 | 14 | 0.2595 | 0.1571 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.559 | 2.586 | 0.0573 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.09463314 | 0.09463314 | 1 | 1.089 | 0.3143 | Non-Significant Effect |
| Error | 1.216041 | 0.08686006 | 14 | | | |
| Total | 1.310674 | 0.1814932 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.045 | 8.885 | 0.1650 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9071 | 0.8408 | 0.1044 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-004 | 8 | 0.6434 | 0.5645 | 0.7222 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | 19.29% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-7651-8844 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | 1.576 | 1.761 | 14 | 0.2477 | 0.0686 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.682 | 2.586 | 0.0295 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1965817 | 0.1965817 | 1 | 2.485 | 0.1373 | Non-Significant Effect |
| Error | 1.10752 | 0.07910856 | 14 | | | |
| Total | 1.304102 | 0.2756903 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.765 | 8.885 | 0.0565 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9185 | 0.8408 | 0.1593 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 27.81% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-6870-1476 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | 3.208 | 1.771 | 13 | 0.1799 | 0.0034 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3962426 | 0.3962426 | 1 | 10.29 | 0.0069 | Significant Effect |
| Error | 0.5006801 | 0.03851385 | 13 | | | |
| Total | 0.8969227 | 0.4347565 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.874 | 9.155 | 0.4302 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.926 | 0.8328 | 0.2378 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 36.15% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-6039-6846 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 35.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | -0.5549 | 1.761 | 14 | 0.2811 | 0.7061 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.363 | 2.586 | 0.1422 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.03137339 | 0.03137339 | 1 | 0.3079 | 0.5877 | Non-Significant Effect |
| Error | 1.426473 | 0.101891 | 14 | | | |
| Total | 1.457847 | 0.1332643 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.791 | 8.885 | 0.4598 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9111 | 0.8408 | 0.1212 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-001 | 8 | 0.8858 | 0.783 | 0.9885 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | -11.11% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-2769-1585 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 0.04504 | 1.761 | 14 | 0.2493 | 0.4824 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.665 | 2.586 | 0.0325 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0001625492 | 0.0001625492 | 1 | 0.002029 | 0.9647 | Non-Significant Effect |
| Error | 1.121659 | 0.08011849 | 14 | | | |
| Total | 1.121822 | 0.08028104 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.438 | 8.885 | 0.0677 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8994 | 0.8408 | 0.0786 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 0.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-4430-7069 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 1.073 | 1.771 | 13 | 0.1824 | 0.1515 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04556256 | 0.04556256 | 1 | 1.151 | 0.3029 | Non-Significant Effect |
| Error | 0.5148192 | 0.03960148 | 13 | | | |
| Total | 0.5603818 | 0.08516404 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.746 | 9.155 | 0.4824 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9754 | 0.8328 | 0.9286 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 12.26% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-6471-0280 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 34.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | 0.7855 | 1.761 | 14 | 0.2775 | 0.2226 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.393 | 2.586 | 0.1248 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.06127386 | 0.06127386 | 1 | 0.6169 | 0.4453 | Non-Significant Effect |
| Error | 1.390483 | 0.0993202 | 14 | | | |
| Total | 1.451757 | 0.1605941 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.927 | 8.885 | 0.4064 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9108 | 0.8408 | 0.1200 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 15.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4935-2722 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -2.077 | 1.761 | 14 | 0.2537 | 0.9716 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.618 | 2.586 | 0.0421 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.357967 | 0.357967 | 1 | 4.313 | 0.0567 | Non-Significant Effect |
| Error | 1.161918 | 0.08299416 | 14 | | | |
| Total | 1.519885 | 0.4409612 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.714 | 8.885 | 0.1048 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9185 | 0.8408 | 0.1598 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 0.0% |
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | -37.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-9981-6798 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.824 | 1.771 | 13 | 0.1894 | 0.9544 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.142038 | 0.142038 | 1 | 3.327 | 0.0912 | Non-Significant Effect |
| Error | 0.5550786 | 0.04269835 | 13 | | | |
| Total | 0.6971166 | 0.1847364 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.46 | 9.155 | 0.6279 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9401 | 0.8328 | 0.3842 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 7 | 0.9013 | 0.815 | 0.9875 | 0.582 | 1.157 | 0.08571 | 0.2268 | 25.16% | 0.0% |
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | -21.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-2167-7153 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 37.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 3.399 | 1.761 | 14 | 0.1791 | 0.0022 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.419 | 2.586 | 0.1115 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4776534 | 0.4776534 | 1 | 11.55 | 0.0043 | Significant Effect |
| Error | 0.5789683 | 0.04135488 | 14 | | | |
| Total | 1.056622 | 0.5190083 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.349 | 8.885 | 0.2823 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9221 | 0.8408 | 0.1826 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 72.71% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4625-2741 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 34.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 4.2 | 1.86 | 8 | 0.164 | 0.0015 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.788 | 2.586 | 0.0154 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5490807 | 0.5490807 | 1 | 17.64 | 0.0009 | Significant Effect |
| Error | 0.4357227 | 0.03112305 | 14 | | | |
| Total | 0.9848034 | 0.5802037 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 13.72 | 8.885 | 0.0027 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8913 | 0.8408 | 0.0585 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 77.96% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-2590-4671 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 7.247 | 1.771 | 13 | 0.1071 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7175026 | 0.7175026 | 1 | 52.52 | <0.0001 | Significant Effect |
| Error | 0.1775942 | 0.01366109 | 13 | | | |
| Total | 0.8950968 | 0.7311637 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.831 | 9.155 | 0.0355 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9515 | 0.8328 | 0.5482 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5431 | 0.4834 | 0.6029 | 0.2945 | 0.7415 | 0.05936 | 0.157 | 28.91% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 80.71% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5674-3852 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 33.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 3.327 | 1.761 | 14 | 0.1589 | 0.0025 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.726 | 2.586 | 0.0227 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3604496 | 0.3604496 | 1 | 11.07 | 0.0050 | Significant Effect |
| Error | 0.4558074 | 0.03255767 | 14 | | | |
| Total | 0.816257 | 0.3930073 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.173 | 8.885 | 0.0128 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9174 | 0.8408 | 0.1529 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 63.16% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-5717-6436 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 5.767 | 1.771 | 13 | 0.113 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5058032 | 0.5058032 | 1 | 33.26 | <0.0001 | Significant Effect |
| Error | 0.1976789 | 0.01520607 | 13 | | | |
| Total | 0.703482 | 0.5210092 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.474 | 9.155 | 0.1280 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9651 | 0.8328 | 0.7802 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5431 | 0.4834 | 0.6029 | 0.2945 | 0.7415 | 0.05936 | 0.157 | 28.91% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 67.77% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-3502-3907 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 39.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 0.5356 | 1.761 | 14 | 0.1872 | 0.3003 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.314 | 2.586 | 0.1743 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01296739 | 0.01296739 | 1 | 0.2869 | 0.6006 | Non-Significant Effect |
| Error | 0.6328384 | 0.04520275 | 14 | | | |
| Total | 0.6458058 | 0.05817013 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.791 | 8.885 | 0.4598 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.915 | 0.8408 | 0.1399 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 11.98% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0173-1802 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 40.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -1.753 | 1.761 | 14 | 0.1917 | 0.9493 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.26 | 2.586 | 0.2160 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1456379 | 0.1456379 | 1 | 3.073 | 0.1015 | Non-Significant Effect |
| Error | 0.663536 | 0.04739543 | 14 | | | |
| Total | 0.8091739 | 0.1930333 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.578 | 8.885 | 0.5622 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9592 | 0.8408 | 0.6471 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | -40.15% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-2605-4216 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 49.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -1.282 | 1.761 | 14 | 0.2331 | 0.8896 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.451 | 2.586 | 0.0965 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1150908 | 0.1150908 | 1 | 1.642 | 0.2208 | Non-Significant Effect |
| Error | 0.981106 | 0.07007901 | 14 | | | |
| Total | 1.096197 | 0.1851698 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.416 | 8.885 | 0.6579 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8883 | 0.8408 | 0.0525 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-011 | 8 | 0.6449 | 0.5359 | 0.7539 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | -35.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-4462-7543 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 40 | | 14 | 1 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.888 | 2.586 | 0.0077 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9034497 | 0.9034497 | 1 | 31.14 | <0.0001 | Significant Effect |
| Error | 0.4061146 | 0.02900819 | 14 | | | |
| Total | 1.309564 | 0.9324579 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.778 | 8.862 | 0.0145 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7542 | 0.8408 | 0.0007 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-3617-7577 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-007 | 9.15 | 1.943 | 6 | 0.1153 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.101348 | 1.101348 | 1 | 96.75 | <0.0001 | Significant Effect |
| Error | 0.1479861 | 0.01138355 | 13 | | | |
| Total | 1.249334 | 1.112732 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 13.4 | 9.33 | 0.0033 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8499 | 0.8328 | 0.0173 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5431 | 0.4834 | 0.6029 | 0.2945 | 0.7415 | 0.05936 | 0.157 | 28.91% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-1227-4551 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 40 | | 14 | 1 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.888 | 2.586 | 0.0077 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9034497 | 0.9034497 | 1 | 31.14 | <0.0001 | Significant Effect |
| Error | 0.4061146 | 0.02900819 | 14 | | | |
| Total | 1.309564 | 0.9324579 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.778 | 8.862 | 0.0145 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7542 | 0.8408 | 0.0007 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8322-5177 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-006 | 9.15 | 1.943 | 6 | 0.1153 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.101348 | 1.101348 | 1 | 96.75 | <0.0001 | Significant Effect |
| Error | 0.1479861 | 0.01138355 | 13 | | | |
| Total | 1.249334 | 1.112732 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 13.4 | 9.33 | 0.0033 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8499 | 0.8328 | 0.0173 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5431 | 0.4834 | 0.6029 | 0.2945 | 0.7415 | 0.05936 | 0.157 | 28.91% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-3847-9913 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 31.6% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 40.5 | | 14 | 1 | 0.0009 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.887 | 2.586 | 0.0078 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8930244 | 0.8930244 | 1 | 30.75 | <0.0001 | Significant Effect |
| Error | 0.4065382 | 0.02903844 | 14 | | | |
| Total | 1.299563 | 0.9220628 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 958.9 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7643 | 0.8408 | 0.0010 | Non-normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.42% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-6915-0997 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 9.094 | 1.943 | 6 | 0.1155 | <0.0001 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.090224 | 1.090224 | 1 | 95.5 | <0.0001 | Significant Effect |
| Error | 0.1484096 | 0.01141613 | 13 | | | |
| Total | 1.238634 | 1.10164 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 407.7 | 9.155 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8648 | 0.8328 | 0.0283 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5431 | 0.4834 | 0.6029 | 0.2945 | 0.7415 | 0.05936 | 0.157 | 28.91% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.49% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-9652-5425 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 41.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | -1.497 | 1.761 | 14 | 0.1979 | 0.9216 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.189 | 2.586 | 0.2811 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1130643 | 0.1130643 | 1 | 2.24 | 0.1567 | Non-Significant Effect |
| Error | 0.7067414 | 0.05048153 | 14 | | | |
| Total | 0.8198057 | 0.1635458 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.351 | 8.885 | 0.7015 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.951 | 0.8408 | 0.5062 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-004 | 8 | 0.6434 | 0.5645 | 0.7222 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | -35.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-3395-2804 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 38.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -0.9699 | 1.761 | 14 | 0.182 | 0.8257 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.38 | 2.586 | 0.1324 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.04020022 | 0.04020022 | 1 | 0.9408 | 0.3485 | Non-Significant Effect |
| Error | 0.5982203 | 0.04273002 | 14 | | | |
| Total | 0.6384206 | 0.08293024 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.114 | 8.885 | 0.3445 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9457 | 0.8408 | 0.4243 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | -21.09% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5814-5396 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 47.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -3.208 | 1.761 | 14 | 0.2254 | 0.9968 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.922 | 2.586 | 0.6779 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.674042 | 0.674042 | 1 | 10.29 | 0.0063 | Significant Effect |
| Error | 0.917174 | 0.06551243 | 14 | | | |
| Total | 1.591216 | 0.7395545 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.258 | 8.885 | 0.7694 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8909 | 0.8408 | 0.0576 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-001 | 8 | 0.8858 | 0.783 | 0.9885 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | -86.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-9999-0386 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 38.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | -3.018 | 1.761 | 14 | 0.1842 | 0.9954 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.352 | 2.586 | 0.1488 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3983198 | 0.3983198 | 1 | 9.107 | 0.0092 | Significant Effect |
| Error | 0.6123594 | 0.04373996 | 14 | | | |
| Total | 1.010679 | 0.4420598 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.969 | 8.885 | 0.3913 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9557 | 0.8408 | 0.5845 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | -66.4% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-3956-4256 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 46.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | -1.58 | 1.761 | 14 | 0.2209 | 0.9318 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.005 | 2.586 | 0.5260 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1570852 | 0.1570852 | 1 | 2.496 | 0.1365 | Non-Significant Effect |
| Error | 0.8811834 | 0.06294167 | 14 | | | |
| Total | 1.038269 | 0.2200269 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.17 | 8.885 | 0.8414 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8896 | 0.8408 | 0.0549 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | -41.7% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-9844-4476 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 40.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | -5.753 | 1.761 | 14 | 0.1901 | 1.0000 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.278 | 2.586 | 0.2007 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.543008 | 1.543008 | 1 | 33.1 | <0.0001 | Significant Effect |
| Error | 0.6526188 | 0.04661563 | 14 | | | |
| Total | 2.195627 | 1.589624 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.647 | 8.885 | 0.5259 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9213 | 0.8408 | 0.1771 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | -130.7% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-8421-2395 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 56.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | -2.096 | 1.761 | 14 | 0.2706 | 0.9726 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.455 | 2.586 | 0.0948 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4145754 | 0.4145754 | 1 | 4.392 | 0.0548 | Non-Significant Effect |
| Error | 1.321529 | 0.09439491 | 14 | | | |
| Total | 1.736104 | 0.5089703 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.254 | 8.885 | 0.3057 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9114 | 0.8408 | 0.1225 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 0.0% |
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | -67.74% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0539-0129 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 8.077 | 1.761 | 14 | 0.2023 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.219 | 2.586 | 0.2520 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.443808 | 3.443808 | 1 | 65.24 | <0.0001 | Significant Effect |
| Error | 0.739045 | 0.05278893 | 14 | | | |
| Total | 4.182853 | 3.496597 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.276 | 8.885 | 0.1402 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9132 | 0.8408 | 0.1311 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-017 | 8 | 0.1297 | 0.06991 | 0.1895 | 0 | 0.3855 | 0.05556 | 0.1571 | 121.2% | 87.74% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2626-9655 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 9.237 | 1.895 | 7 | 0.1954 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.471 | 2.586 | 0.0878 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.631407 | 3.631407 | 1 | 85.33 | <0.0001 | Significant Effect |
| Error | 0.5957994 | 0.0425571 | 14 | | | |
| Total | 4.227206 | 3.673964 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 19.12 | 8.885 | 0.0009 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9304 | 0.8408 | 0.2473 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-016 | 8 | 0.1047 | 0.08001 | 0.1295 | 0.0225 | 0.2015 | 0.02299 | 0.06504 | 62.09% | 90.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-4434-3507 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.4% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 8.415 | 1.86 | 8 | 0.195 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.431 | 2.586 | 0.1058 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.115225 | 3.115225 | 1 | 70.81 | <0.0001 | Significant Effect |
| Error | 0.6158841 | 0.04399172 | 14 | | | |
| Total | 3.731109 | 3.159217 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 11.39 | 8.885 | 0.0047 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.943 | 0.8408 | 0.3876 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-015 | 8 | 0.1751 | 0.143 | 0.2071 | 0.0625 | 0.303 | 0.02979 | 0.08426 | 48.13% | 83.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-9808-2302 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 5.372 | 1.761 | 14 | 0.2096 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.142 | 2.586 | 0.3327 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.634562 | 1.634562 | 1 | 28.86 | <0.0001 | Significant Effect |
| Error | 0.7929152 | 0.0566368 | 14 | | | |
| Total | 2.427477 | 1.691198 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.497 | 8.885 | 0.2503 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.955 | 0.8408 | 0.5734 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-014 | 8 | 0.4183 | 0.3499 | 0.4868 | 0.053 | 0.63 | 0.06363 | 0.18 | 43.02% | 60.45% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-2610-2722 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | 3.228 | 1.761 | 14 | 0.2136 | 0.0030 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.102 | 2.586 | 0.3825 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.613089 | 0.613089 | 1 | 10.42 | 0.0061 | Significant Effect |
| Error | 0.8236127 | 0.05882948 | 14 | | | |
| Total | 1.436702 | 0.6719185 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.199 | 8.885 | 0.3202 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9407 | 0.8408 | 0.3571 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-013 | 8 | 0.6661 | 0.5931 | 0.739 | 0.398 | 0.963 | 0.0678 | 0.1918 | 28.79% | 37.02% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-3684-2746 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 23.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 2.891 | 1.761 | 14 | 0.2514 | 0.0059 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.273 | 2.586 | 0.2052 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.6812438 | 0.6812438 | 1 | 8.357 | 0.0119 | Significant Effect |
| Error | 1.141183 | 0.08151305 | 14 | | | |
| Total | 1.822427 | 0.7627569 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.016 | 8.885 | 0.9843 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9238 | 0.8408 | 0.1938 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-011 | 8 | 0.6449 | 0.5359 | 0.7539 | 0.018 | 1.018 | 0.1013 | 0.2866 | 44.44% | 39.02% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0207-6423 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-007 | 10.52 | 1.895 | 7 | 0.1905 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.535 | 2.586 | 0.0646 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.473754 | 4.473754 | 1 | 110.6 | <0.0001 | Significant Effect |
| Error | 0.5661913 | 0.04044224 | 14 | | | |
| Total | 5.039945 | 4.514196 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 19.53 | 8.862 | 0.0006 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8529 | 0.8408 | 0.0150 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-007 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-6328-4991 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-006 | 10.52 | 1.895 | 7 | 0.1905 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.535 | 2.586 | 0.0646 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.473754 | 4.473754 | 1 | 110.6 | <0.0001 | Significant Effect |
| Error | 0.5661913 | 0.04044224 | 14 | | | |
| Total | 5.039945 | 4.514196 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 19.53 | 8.862 | 0.0006 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8529 | 0.8408 | 0.0150 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-006 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-9722-7311 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 18.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 10.49 | 1.895 | 7 | 0.1906 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.534 | 2.586 | 0.0649 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.450518 | 4.450518 | 1 | 110 | <0.0001 | Significant Effect |
| Error | 0.5666149 | 0.04047249 | 14 | | | |
| Total | 5.017133 | 4.49099 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1337 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8601 | 0.8408 | 0.0192 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-005 | 8 | 0.00275 | -0.000209 | 0.005709 | 0 | 0.022 | 0.00275 | 0.007778 | 282.8% | 99.74% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-1800-0410 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | 3.329 | 1.761 | 14 | 0.2191 | 0.0025 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.049 | 2.586 | 0.4565 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.6862052 | 0.6862052 | 1 | 11.08 | 0.0050 | Significant Effect |
| Error | 0.8668181 | 0.06191558 | 14 | | | |
| Total | 1.553023 | 0.7481208 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.883 | 8.885 | 0.4227 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9194 | 0.8408 | 0.1651 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-004 | 8 | 0.6434 | 0.5645 | 0.7222 | 0.3575 | 0.957 | 0.07327 | 0.2072 | 32.21% | 39.16% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-9616-2643 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | 4.143 | 1.761 | 14 | 0.205 | 0.0005 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.191 | 2.586 | 0.2798 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9295378 | 0.9295378 | 1 | 17.16 | 0.0010 | Significant Effect |
| Error | 0.758297 | 0.05416407 | 14 | | | |
| Total | 1.687835 | 0.9837019 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.947 | 8.885 | 0.1772 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9574 | 0.8408 | 0.6145 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-002 | 8 | 0.5755 | 0.5125 | 0.6385 | 0.3295 | 0.7895 | 0.05857 | 0.1657 | 28.79% | 45.58% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-6374-5659 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 23.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 1.239 | 1.761 | 14 | 0.2443 | 0.1179 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.838 | 2.586 | 0.8629 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1180779 | 0.1180779 | 1 | 1.535 | 0.2358 | Non-Significant Effect |
| Error | 1.077251 | 0.07694647 | 14 | | | |
| Total | 1.195328 | 0.1950244 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.108 | 8.885 | 0.8960 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9079 | 0.8408 | 0.1077 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-001 | 8 | 0.8858 | 0.783 | 0.9885 | 0.4715 | 1.171 | 0.09553 | 0.2702 | 30.51% | 16.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-4275-8254 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 19.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 2.271 | 1.761 | 14 | 0.2069 | 0.0197 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.171 | 2.586 | 0.3010 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2846217 | 0.2846217 | 1 | 5.159 | 0.0394 | Significant Effect |
| Error | 0.7724361 | 0.05517401 | 14 | | | |
| Total | 1.057058 | 0.3397957 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.745 | 8.885 | 0.2061 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9452 | 0.8408 | 0.4173 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-012 | 8 | 0.7908 | 0.7255 | 0.8561 | 0.5865 | 1.126 | 0.06069 | 0.1716 | 21.71% | 25.22% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-2164-6172 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 22.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 2.817 | 1.761 | 14 | 0.2402 | 0.0069 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.87 | 2.586 | 0.7896 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5902628 | 0.5902628 | 1 | 7.936 | 0.0137 | Significant Effect |
| Error | 1.04126 | 0.07437572 | 14 | | | |
| Total | 1.631523 | 0.6646385 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.192 | 8.885 | 0.8229 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9098 | 0.8408 | 0.1157 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-010 | 8 | 0.6734 | 0.5743 | 0.7725 | 0.1875 | 0.9315 | 0.09211 | 0.2605 | 38.69% | 36.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2022-3940 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 20.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | -0.3219 | 1.761 | 14 | 0.2122 | 0.6239 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.116 | 2.586 | 0.3645 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.006014536 | 0.006014536 | 1 | 0.1036 | 0.7523 | Non-Significant Effect |
| Error | 0.8126954 | 0.05804968 | 14 | | | |
| Total | 0.81871 | 0.06406421 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.297 | 8.885 | 0.2949 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9524 | 0.8408 | 0.5287 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-009 | 8 | 1.096 | 1.025 | 1.168 | 0.7255 | 1.332 | 0.06635 | 0.1877 | 17.12% | -3.67% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-5827-3669 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 27.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 1.601 | 1.761 | 14 | 0.2865 | 0.0659 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.319 | 2.586 | 0.1709 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2711806 | 0.2711806 | 1 | 2.562 | 0.1317 | Non-Significant Effect |
| Error | 1.481605 | 0.105829 | 14 | | | |
| Total | 1.752786 | 0.3770096 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.617 | 8.885 | 0.5415 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9035 | 0.8408 | 0.0914 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-008 | 8 | 0.7972 | 0.6596 | 0.9347 | 0.0685 | 1.157 | 0.1279 | 0.3616 | 45.36% | 24.62% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-6489-0745 | **Endpoint:** | Mean Dry Biomass-mg | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes mean dry biomass-mg endpoint | 21.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 4.419 | 1.761 | 14 | 0.2321 | 0.0003 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.935 | 2.586 | 0.6527 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.356352 | 1.356352 | 1 | 19.53 | 0.0006 | Significant Effect |
| Error | 0.972306 | 0.06945042 | 14 | | | |
| Total | 2.328658 | 1.425803 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.394 | 8.885 | 0.6721 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9148 | 0.8408 | 0.1391 | Normal Distribution |

**Mean Dry Biomass-mg Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 1.058 | 0.9494 | 1.166 | 0.565 | 1.362 | 0.1006 | 0.2844 | 26.89% | 0.0% |
| 19830-003 | 8 | 0.4752 | 0.3836 | 0.5669 | 0 | 0.7415 | 0.08516 | 0.2409 | 50.68% | 55.06% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-4055-1807 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 56.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | -0.05309 | 1.761 | 14 | 0.7027 | 0.5208 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.731 | 2.586 | 0.0220 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.001794631 | 0.001794631 | 1 | 0.002818 | 0.9584 | Non-Significant Effect |
| Error | 8.914628 | 0.6367592 | 14 | | | |
| Total | 8.916423 | 0.6385538 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.621 | 8.885 | 0.2269 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9188 | 0.8408 | 0.1615 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | -1.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-4059-9018 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 52.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | -1.144 | 1.771 | 13 | 0.4986 | 0.8633 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3870664 | 0.3870664 | 1 | 1.308 | 0.2734 | Non-Significant Effect |
| Error | 3.847378 | 0.2959521 | 13 | | | |
| Total | 4.234445 | 0.6830186 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.523 | 10.79 | 0.6243 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9452 | 0.8328 | 0.4523 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | -33.87% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4292-5600 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 51.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 1.999 | 1.761 | 14 | 0.6498 | 0.0327 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.954 | 2.586 | 0.0047 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.175983 | 2.175983 | 1 | 3.997 | 0.0654 | Non-Significant Effect |
| Error | 7.622161 | 0.5444401 | 14 | | | |
| Total | 9.798144 | 2.720423 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.517 | 8.885 | 0.0384 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8637 | 0.8408 | 0.0218 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | 58.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-0004-3817 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 42.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 1.904 | 1.771 | 13 | 0.4063 | 0.0397 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7121379 | 0.7121379 | 1 | 3.624 | 0.0793 | Non-Significant Effect |
| Error | 2.554911 | 0.1965316 | 13 | | | |
| Total | 3.267049 | 0.9086696 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.382 | 9.155 | 0.6767 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9459 | 0.8328 | 0.4629 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | 45.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-6498-7848 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 53.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 2.583 | 1.86 | 8 | 0.6658 | 0.0162 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.044 | 2.586 | 0.0022 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.421445 | 3.421445 | 1 | 6.672 | 0.0217 | Significant Effect |
| Error | 7.179107 | 0.5127933 | 14 | | | |
| Total | 10.60055 | 3.934238 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.882 | 8.885 | 0.0100 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8414 | 0.8408 | 0.0102 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | 73.9% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-0558-6780 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 38.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 2.992 | 1.771 | 13 | 0.3694 | 0.0052 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.453892 | 1.453892 | 1 | 8.95 | 0.0104 | Significant Effect |
| Error | 2.111856 | 0.1624505 | 13 | | | |
| Total | 3.565748 | 1.616342 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.225 | 9.155 | 0.3192 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.964 | 0.8328 | 0.7606 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | 65.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0883-1299 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.8% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.21 | 2.586 | 0.0004 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.264742 | 6.264742 | 1 | 13.59 | 0.0024 | Significant Effect |
| Error | 6.452612 | 0.4609009 | 14 | | | |
| Total | 12.71735 | 6.725643 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.666 | 8.862 | 0.0217 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7213 | 0.8408 | 0.0003 | Non-normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-2959-1043 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 5.234 | 1.943 | 6 | 0.3529 | 0.0010 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.374041 | 3.374041 | 1 | 31.66 | <0.0001 | Significant Effect |
| Error | 1.385362 | 0.1065663 | 13 | | | |
| Total | 4.759403 | 3.480607 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 35.82 | 9.33 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8804 | 0.8328 | 0.0480 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-5754-8886 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.8% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.21 | 2.586 | 0.0004 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.264742 | 6.264742 | 1 | 13.59 | 0.0024 | Significant Effect |
| Error | 6.452612 | 0.4609009 | 14 | | | |
| Total | 12.71735 | 6.725643 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.666 | 8.862 | 0.0217 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7213 | 0.8408 | 0.0003 | Non-normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-6183-0767 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 5.234 | 1.943 | 6 | 0.3529 | 0.0010 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.374041 | 3.374041 | 1 | 31.66 | <0.0001 | Significant Effect |
| Error | 1.385362 | 0.1065663 | 13 | | | |
| Total | 4.759403 | 3.480607 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 35.82 | 9.33 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8804 | 0.8328 | 0.0480 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-7360-8970 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 84.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 2.183 | 1.833 | 9 | 1.051 | 0.0284 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.621 | 2.355 | 0.0056 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.417132 | 3.417132 | 1 | 4.766 | 0.0569 | Non-Significant Effect |
| Error | 6.452612 | 0.7169569 | 9 | | | |
| Total | 9.869744 | 4.134089 | 10 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 1.524 | 11.26 | 0.2521 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8121 | 0.7725 | 0.0136 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-6055-0134 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 56.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 3.311 | 1.86 | 8 | 0.534 | 0.0053 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.897898 | 1.897898 | 1 | 10.96 | 0.0107 | Significant Effect |
| Error | 1.385362 | 0.1731703 | 8 | | | |
| Total | 3.28326 | 2.071068 | 9 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.836 | 13.75 | 0.0312 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9719 | 0.7411 | 0.9082 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-9372-7114 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 55.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | 1.122 | 1.761 | 14 | 0.6967 | 0.1404 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.755 | 2.586 | 0.0190 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7875668 | 0.7875668 | 1 | 1.258 | 0.2808 | Non-Significant Effect |
| Error | 8.761646 | 0.6258318 | 14 | | | |
| Total | 9.549213 | 1.413399 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.795 | 8.885 | 0.1986 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8959 | 0.8408 | 0.0692 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-001 | 8 | 0.8077 | 0.5893 | 1.026 | 0 | 1.737 | 0.2031 | 0.5743 | 71.1% | 35.46% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-4650-5266 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 53.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 1.956 | 1.761 | 14 | 0.6636 | 0.0354 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.893 | 2.586 | 0.0075 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.172303 | 2.172303 | 1 | 3.826 | 0.0707 | Non-Significant Effect |
| Error | 7.948308 | 0.5677363 | 14 | | | |
| Total | 10.12061 | 2.740039 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.314 | 8.885 | 0.0727 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8725 | 0.8408 | 0.0297 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | 58.89% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-5479-1748 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 45.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 1.79 | 1.771 | 13 | 0.4315 | 0.0484 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7101045 | 0.7101045 | 1 | 3.204 | 0.0968 | Non-Significant Effect |
| Error | 2.881058 | 0.2216198 | 13 | | | |
| Total | 3.591162 | 0.9317244 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.081 | 9.155 | 0.9081 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9668 | 0.8328 | 0.8079 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | 45.88% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-2292-2893 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 51.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 1.735 | 1.761 | 14 | 0.6489 | 0.0523 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.958 | 2.586 | 0.0045 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.635019 | 1.635019 | 1 | 3.012 | 0.1046 | Non-Significant Effect |
| Error | 7.600948 | 0.5429249 | 14 | | | |
| Total | 9.235968 | 2.177944 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.619 | 8.885 | 0.0366 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8657 | 0.8408 | 0.0233 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | 51.09% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3885-9782 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 42.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 1.482 | 1.771 | 13 | 0.4046 | 0.0811 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4278482 | 0.4278482 | 1 | 2.195 | 0.1623 | Non-Significant Effect |
| Error | 2.533698 | 0.1948998 | 13 | | | |
| Total | 2.961546 | 0.622748 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.407 | 9.155 | 0.6604 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9643 | 0.8328 | 0.7659 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | 35.61% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-1931-4927 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 154.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 1.229 | 1.895 | 7 | 1.929 | 0.1294 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.345 | 2.215 | 0.0161 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.392165 | 1.392165 | 1 | 1.51 | 0.2588 | Non-Significant Effect |
| Error | 6.452612 | 0.9218017 | 7 | | | |
| Total | 7.844777 | 2.313967 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.8418 | 0.7007 | 0.0605 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-5259-1683 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 105.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 1.851 | 1.943 | 6 | 0.9982 | 0.0568 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7907909 | 0.7907909 | 1 | 3.425 | 0.1137 | Non-Significant Effect |
| Error | 1.385362 | 0.2308937 | 6 | | | |
| Total | 2.176153 | 1.021685 | 7 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9852 | 0.6451 | 0.9839 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-6325-0688 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 5.08 | 1.895 | 7 | 0.5404 | 0.0007 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.108 | 2.586 | 0.3744 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.399934 | 8.399934 | 1 | 25.81 | 0.0002 | Significant Effect |
| Error | 4.556168 | 0.3254406 | 14 | | | |
| Total | 12.9561 | 8.725374 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 11.29 | 8.862 | 0.0047 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8709 | 0.8408 | 0.0281 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-5605-5125 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 5.08 | 1.895 | 7 | 0.5404 | 0.0007 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.108 | 2.586 | 0.3744 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.399934 | 8.399934 | 1 | 25.81 | 0.0002 | Significant Effect |
| Error | 4.556168 | 0.3254406 | 14 | | | |
| Total | 12.9561 | 8.725374 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 11.29 | 8.862 | 0.0047 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8709 | 0.8408 | 0.0281 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4954-7912 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 60.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 3.008 | 1.833 | 9 | 0.883 | 0.0074 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.721 | 2.355 | 0.7324 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.581782 | 4.581782 | 1 | 9.051 | 0.0148 | Significant Effect |
| Error | 4.556168 | 0.5062409 | 9 | | | |
| Total | 9.13795 | 5.088023 | 10 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 2.579 | 11.26 | 0.1469 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9191 | 0.7725 | 0.3108 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-8045-3363 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 3.655 | 1.761 | 14 | 0.541 | 0.0013 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.958 | 2.586 | 0.6082 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.040169 | 5.040169 | 1 | 13.36 | 0.0026 | Significant Effect |
| Error | 5.282662 | 0.377333 | 14 | | | |
| Total | 10.32283 | 5.417502 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.271 | 8.885 | 0.0271 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9417 | 0.8408 | 0.3709 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | 77.46% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-5874-2437 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 112.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 1.693 | 1.895 | 7 | 1.621 | 0.0671 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.54 | 2.215 | 0.9317 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.866652 | 1.866652 | 1 | 2.868 | 0.1342 | Non-Significant Effect |
| Error | 4.556168 | 0.6508812 | 7 | | | |
| Total | 6.42282 | 2.517533 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.905 | 0.7007 | 0.2826 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-5805-6478 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 43.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | 0.4985 | 1.761 | 14 | 0.6235 | 0.3129 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.861 | 2.586 | 0.8099 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1245766 | 0.1245766 | 1 | 0.2485 | 0.6259 | Non-Significant Effect |
| Error | 7.018184 | 0.5012988 | 14 | | | |
| Total | 7.142761 | 0.6258755 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.851 | 8.885 | 0.4354 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9836 | 0.8408 | 0.9858 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | 12.18% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-9640-8377 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 38.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | 2.925 | 1.761 | 14 | 0.5632 | 0.0055 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.881 | 2.586 | 0.7646 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.49854 | 3.49854 | 1 | 8.554 | 0.0111 | Significant Effect |
| Error | 5.725717 | 0.4089798 | 14 | | | |
| Total | 9.224257 | 3.90752 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.896 | 8.885 | 0.0934 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9411 | 0.8408 | 0.3625 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | 64.54% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-9288-1203 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 53.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | 0.4458 | 1.761 | 14 | 0.7809 | 0.3313 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.458 | 2.586 | 0.0935 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1562757 | 0.1562757 | 1 | 0.1987 | 0.6626 | Non-Significant Effect |
| Error | 11.00878 | 0.7863415 | 14 | | | |
| Total | 11.16506 | 0.9426172 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.416 | 8.885 | 0.6576 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8989 | 0.8408 | 0.0771 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 13.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-7563-8467 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 42.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | 1.832 | 1.761 | 14 | 0.6167 | 0.0442 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.718 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.645491 | 1.645491 | 1 | 3.356 | 0.0883 | Non-Significant Effect |
| Error | 6.865202 | 0.4903716 | 14 | | | |
| Total | 8.510693 | 2.135862 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.973 | 8.885 | 0.3899 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9307 | 0.8408 | 0.2503 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-001 | 8 | 0.8077 | 0.5893 | 1.026 | 0 | 1.737 | 0.2031 | 0.5743 | 71.1% | 44.26% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-3810-8029 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 40.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | 2.843 | 1.761 | 14 | 0.579 | 0.0065 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.829 | 2.586 | 0.8840 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.493873 | 3.493873 | 1 | 8.083 | 0.0130 | Significant Effect |
| Error | 6.051864 | 0.432276 | 14 | | | |
| Total | 9.545737 | 3.926149 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.046 | 8.885 | 0.1649 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9333 | 0.8408 | 0.2745 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | 64.49% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-2171-1690 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 38.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | 2.622 | 1.761 | 14 | 0.5621 | 0.0100 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.884 | 2.586 | 0.7569 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.802263 | 2.802263 | 1 | 6.877 | 0.0201 | Significant Effect |
| Error | 5.704504 | 0.4074646 | 14 | | | |
| Total | 8.506766 | 3.209727 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.968 | 8.885 | 0.0894 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.945 | 0.8408 | 0.4147 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | 57.76% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-0113-7143 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 3.532 | 1.895 | 7 | 1.27 | 0.0048 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.43 | 2.586 | 0.1061 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 22.42749 | 22.42749 | 1 | 12.48 | 0.0033 | Significant Effect |
| Error | 25.16597 | 1.797569 | 14 | | | |
| Total | 47.59345 | 24.22506 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 33.64 | 8.885 | 0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9428 | 0.8408 | 0.3847 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | 87.88% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-9077-1860 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 46.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 4.079 | 1.895 | 7 | 1.252 | 0.0023 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.466 | 2.586 | 0.0901 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 29.04131 | 29.04131 | 1 | 16.64 | 0.0011 | Significant Effect |
| Error | 24.43947 | 1.745677 | 14 | | | |
| Total | 53.48078 | 30.78698 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 15.61 | 8.862 | 0.0014 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8694 | 0.8408 | 0.0266 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-2284-6246 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 46.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 4.079 | 1.895 | 7 | 1.252 | 0.0023 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.466 | 2.586 | 0.0901 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 29.04131 | 29.04131 | 1 | 16.64 | 0.0011 | Significant Effect |
| Error | 24.43947 | 1.745677 | 14 | | | |
| Total | 53.48078 | 30.78698 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 15.61 | 8.862 | 0.0014 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8694 | 0.8408 | 0.0266 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-6524-9127 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 75.9% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 2.415 | 1.833 | 9 | 2.045 | 0.0195 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.013 | 2.355 | 0.2722 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 15.84071 | 15.84071 | 1 | 5.833 | 0.0389 | Significant Effect |
| Error | 24.43947 | 2.715497 | 9 | | | |
| Total | 40.28019 | 18.55621 | 10 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 3.569 | 11.26 | 0.0956 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9531 | 0.7725 | 0.6838 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-2466-7355 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 139.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 1.36 | 1.895 | 7 | 3.755 | 0.1081 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.801 | 2.215 | 0.4132 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.453623 | 6.453623 | 1 | 1.848 | 0.2161 | Non-Significant Effect |
| Error | 24.43947 | 3.491354 | 7 | | | |
| Total | 30.8931 | 9.944977 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9686 | 0.7007 | 0.8823 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8634-1529 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 2.051 | 1.86 | 8 | 1.289 | 0.0372 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.35 | 2.586 | 0.1499 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.086566 | 8.086566 | 1 | 4.208 | 0.0594 | Non-Significant Effect |
| Error | 26.90149 | 1.921535 | 14 | | | |
| Total | 34.98806 | 10.0081 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.927 | 8.885 | 0.0072 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.961 | 0.8408 | 0.6795 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | 52.77% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-3150-1681 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | 3.225 | 1.895 | 7 | 1.281 | 0.0073 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.409 | 2.586 | 0.1166 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 19.01983 | 19.01983 | 1 | 10.4 | 0.0061 | Significant Effect |
| Error | 25.60902 | 1.829216 | 14 | | | |
| Total | 44.62885 | 20.84905 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 20.9 | 8.885 | 0.0007 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9567 | 0.8408 | 0.6019 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | 80.93% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-9997-3427 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | 1.731 | 1.761 | 14 | 1.267 | 0.0527 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.264 | 2.586 | 0.2124 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.203759 | 6.203759 | 1 | 2.995 | 0.1055 | Non-Significant Effect |
| Error | 28.99564 | 2.071117 | 14 | | | |
| Total | 35.1994 | 8.274877 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.364 | 8.885 | 0.0414 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9722 | 0.8408 | 0.8722 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 46.22% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0594-9490 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 48.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 1.943 | 1.761 | 14 | 1.308 | 0.0362 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.193 | 2.586 | 0.2772 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.329295 | 8.329295 | 1 | 3.775 | 0.0724 | Non-Significant Effect |
| Error | 30.89209 | 2.206578 | 14 | | | |
| Total | 39.22138 | 10.53587 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.788 | 8.885 | 0.1000 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9591 | 0.8408 | 0.6458 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 53.55% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-9007-3471 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 2.73 | 1.86 | 8 | 1.285 | 0.0129 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.357 | 2.586 | 0.1458 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 14.23931 | 14.23931 | 1 | 7.453 | 0.0163 | Significant Effect |
| Error | 26.74851 | 1.910608 | 14 | | | |
| Total | 40.98782 | 16.14992 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 10.58 | 8.885 | 0.0059 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.971 | 0.8408 | 0.8547 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-001 | 8 | 0.8077 | 0.5893 | 1.026 | 0 | 1.737 | 0.2031 | 0.5743 | 71.1% | 70.02% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-7958-4198 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | 3.203 | 1.895 | 7 | 1.289 | 0.0075 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.394 | 2.586 | 0.1246 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 19.00895 | 19.00895 | 1 | 10.26 | 0.0064 | Significant Effect |
| Error | 25.93517 | 1.852512 | 14 | | | |
| Total | 44.94411 | 20.86146 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 16.34 | 8.885 | 0.0015 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9586 | 0.8408 | 0.6371 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | 80.9% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-6466-6582 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 47.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 3.081 | 1.895 | 7 | 1.281 | 0.0089 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.41 | 2.586 | 0.1161 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 17.34498 | 17.34498 | 1 | 9.49 | 0.0081 | Significant Effect |
| Error | 25.58781 | 1.827701 | 14 | | | |
| Total | 42.93279 | 19.17268 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 21.28 | 8.885 | 0.0007 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9548 | 0.8408 | 0.5691 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | 77.28% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8422-2449 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 52.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 1.005 | 1.761 | 14 | 0.9424 | 0.1660 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.751 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.156166 | 1.156166 | 1 | 1.01 | 0.3321 | Non-Significant Effect |
| Error | 16.03279 | 1.145199 | 14 | | | |
| Total | 17.18896 | 2.301365 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.512 | 8.885 | 0.0385 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9425 | 0.8408 | 0.3805 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | 29.7% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-7191-9676 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 52.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | 2.527 | 1.86 | 8 | 0.954 | 0.0177 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.826 | 2.586 | 0.8918 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.72228 | 6.72228 | 1 | 6.385 | 0.0242 | Significant Effect |
| Error | 14.74032 | 1.05288 | 14 | | | |
| Total | 21.4626 | 7.77516 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 11.6 | 8.885 | 0.0045 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9467 | 0.8408 | 0.4396 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | 71.61% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7657-3563 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 52.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 2.936 | 1.895 | 7 | 0.9573 | 0.0109 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.854 | 2.586 | 0.8246 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.805044 | 8.805044 | 1 | 8.622 | 0.0108 | Significant Effect |
| Error | 14.29727 | 1.021234 | 14 | | | |
| Total | 23.10231 | 9.826278 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 18.68 | 8.885 | 0.0010 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9388 | 0.8408 | 0.3343 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | 81.96% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-6206-7474 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 51.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 3.677 | 1.895 | 7 | 0.9327 | 0.0039 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.903 | 2.586 | 0.7163 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 13.10846 | 13.10846 | 1 | 13.52 | 0.0025 | Significant Effect |
| Error | 13.57078 | 0.969341 | 14 | | | |
| Total | 26.67924 | 14.07781 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 34.42 | 8.862 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8756 | 0.8408 | 0.0331 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-4586-8221 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 51.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 3.677 | 1.895 | 7 | 0.9327 | 0.0039 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.903 | 2.586 | 0.7163 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 13.10846 | 13.10846 | 1 | 13.52 | 0.0025 | Significant Effect |
| Error | 13.57078 | 0.969341 | 14 | | | |
| Total | 26.67924 | 14.07781 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 34.42 | 8.862 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8756 | 0.8408 | 0.0331 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-0358-7781 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 84.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 2.178 | 1.833 | 9 | 1.524 | 0.0287 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.554 | 2.355 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 7.150072 | 7.150072 | 1 | 4.742 | 0.0574 | Non-Significant Effect |
| Error | 13.57078 | 1.507864 | 9 | | | |
| Total | 20.72085 | 8.657935 | 10 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.867 | 11.26 | 0.0230 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9083 | 0.7725 | 0.2325 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2987-0508 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 155.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 1.226 | 1.895 | 7 | 2.798 | 0.1300 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.39 | 2.215 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.912992 | 2.912992 | 1 | 1.503 | 0.2599 | Non-Significant Effect |
| Error | 13.57078 | 1.938682 | 7 | | | |
| Total | 16.48377 | 4.851674 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.8822 | 0.7007 | 0.1655 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-5601-9508 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 52.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | 2.337 | 1.86 | 8 | 0.9534 | 0.0238 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.827 | 2.586 | 0.8886 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.742222 | 5.742222 | 1 | 5.462 | 0.0348 | Significant Effect |
| Error | 14.71911 | 1.051365 | 14 | | | |
| Total | 20.46133 | 6.793587 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 11.82 | 8.885 | 0.0042 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9463 | 0.8408 | 0.4340 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | 66.19% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-3194-6202 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 53.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | 2.498 | 1.86 | 8 | 0.9645 | 0.0185 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.806 | 2.586 | 0.9418 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.71581 | 6.71581 | 1 | 6.24 | 0.0256 | Significant Effect |
| Error | 15.06647 | 1.076177 | 14 | | | |
| Total | 21.78228 | 7.791987 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 9.073 | 8.885 | 0.0094 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9443 | 0.8408 | 0.4047 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | 71.58% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-1963-2139 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 51.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | 1.883 | 1.761 | 14 | 0.9379 | 0.0403 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.759 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.020283 | 4.020283 | 1 | 3.544 | 0.0807 | Non-Significant Effect |
| Error | 15.87981 | 1.134272 | 14 | | | |
| Total | 19.90009 | 5.154555 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.877 | 8.885 | 0.0324 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9449 | 0.8408 | 0.4136 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-001 | 8 | 0.8077 | 0.5893 | 1.026 | 0 | 1.737 | 0.2031 | 0.5743 | 71.1% | 55.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0151-6110 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 58.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 0.9345 | 1.761 | 14 | 1.053 | 0.1829 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.822 | 2.586 | 0.9009 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.249063 | 1.249063 | 1 | 0.8733 | 0.3659 | Non-Significant Effect |
| Error | 20.02339 | 1.430242 | 14 | | | |
| Total | 21.27245 | 2.679305 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.103 | 8.885 | 0.3478 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9634 | 0.8408 | 0.7237 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 30.87% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-4948-3096 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 55.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | 0.6348 | 1.761 | 14 | 1.002 | 0.2679 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.647 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5217136 | 0.5217136 | 1 | 0.4029 | 0.5358 | Non-Significant Effect |
| Error | 18.12694 | 1.294782 | 14 | | | |
| Total | 18.64866 | 1.816495 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.979 | 8.885 | 0.1732 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9086 | 0.8408 | 0.1104 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 19.95% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-9098-1469 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 80.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.073 | 1.761 | 14 | 1.451 | 0.8493 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.977 | 2.586 | 0.5732 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.12737 | 3.12737 | 1 | 1.152 | 0.3013 | Non-Significant Effect |
| Error | 38.01025 | 2.715018 | 14 | | | |
| Total | 41.13762 | 5.842388 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.801 | 8.885 | 0.4557 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9472 | 0.8408 | 0.4470 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 0.0% |
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | -48.84% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-2393-9547 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 99.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 1.864 | 1.86 | 8 | 0.2709 | 0.0497 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.866 | 2.29 | 0.3954 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.1547686 | 0.1547686 | 1 | 3.474 | 0.0993 | Non-Significant Effect |
| Error | 0.3564256 | 0.0445532 | 8 | | | |
| Total | 0.5111942 | 0.1993218 | 9 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 2.781 | 13.75 | 0.1464 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8928 | 0.7411 | 0.1824 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-2586-3877 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 55.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 40 | | 13 | 1 | 0.0019 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.328 | 2.548 | 0.1438 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2751441 | 0.2751441 | 1 | 10.04 | 0.0074 | Significant Effect |
| Error | 0.3564256 | 0.02741736 | 13 | | | |
| Total | 0.6315697 | 0.3025615 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.71 | 9.33 | 0.0039 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8074 | 0.8328 | 0.0046 | Non-normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-3402-9989 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 55.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 40 | | 13 | 1 | 0.0019 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.328 | 2.548 | 0.1438 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2751441 | 0.2751441 | 1 | 10.04 | 0.0074 | Significant Effect |
| Error | 0.3564256 | 0.02741736 | 13 | | | |
| Total | 0.6315697 | 0.3025615 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.71 | 9.33 | 0.0039 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8074 | 0.8328 | 0.0046 | Non-normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-5727-1122 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 97.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | -0.3691 | 1.771 | 13 | 0.2645 | 0.6410 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.942 | 2.548 | 0.5839 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.01135079 | 0.01135079 | 1 | 0.1363 | 0.7180 | Non-Significant Effect |
| Error | 1.08292 | 0.08330152 | 13 | | | |
| Total | 1.094271 | 0.09465232 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.747 | 10.79 | 0.5137 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9301 | 0.8328 | 0.2735 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | -20.31% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-0636-2275 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 116.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -1.367 | 1.771 | 13 | 0.314 | 0.9026 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.791 | 2.548 | 0.9052 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2194283 | 0.2194283 | 1 | 1.869 | 0.1947 | Non-Significant Effect |
| Error | 1.525975 | 0.1173827 | 13 | | | |
| Total | 1.745403 | 0.336811 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.813 | 10.79 | 0.2286 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9523 | 0.8328 | 0.5620 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | -89.3% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-2753-3797 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 157.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -4.155 | 1.771 | 13 | 0.4268 | 0.9994 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.836 | 2.548 | 0.0080 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.74214 | 3.74214 | 1 | 17.26 | 0.0011 | Significant Effect |
| Error | 2.818442 | 0.2168032 | 13 | | | |
| Total | 6.560581 | 3.958943 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.921 | 10.79 | 0.0456 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8727 | 0.8328 | 0.0369 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | -368.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-5324-8147 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 99.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -7.795 | 1.782 | 12 | 0.2705 | 1.0000 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.8981 | 4.8981 | 1 | 60.76 | <0.0001 | Significant Effect |
| Error | 0.9674125 | 0.0806177 | 12 | | | |
| Total | 5.865513 | 4.978718 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.714 | 11.07 | 0.5289 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9394 | 0.8239 | 0.4102 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-011 | 7 | 1.454 | 1.333 | 1.576 | 1.063 | 2 | 0.1206 | 0.3191 | 21.94% | -435.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-6284-6895 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 187.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 1.042 | 1.943 | 6 | 0.5063 | 0.1688 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.646 | 2.127 | 0.5756 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0644869 | 0.0644869 | 1 | 1.086 | 0.3376 | Non-Significant Effect |
| Error | 0.3564256 | 0.05940427 | 6 | | | |
| Total | 0.4209125 | 0.1238912 | 7 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9057 | 0.6451 | 0.3248 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-2926-7483 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 115.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | -1.935 | 1.771 | 13 | 0.3118 | 0.9625 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.136 | 2.548 | 0.3051 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4332449 | 0.4332449 | 1 | 3.743 | 0.0751 | Non-Significant Effect |
| Error | 1.504761 | 0.1157509 | 13 | | | |
| Total | 1.938006 | 0.5489957 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.762 | 10.79 | 0.2367 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.965 | 0.8328 | 0.7786 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | -125.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-9396-8133 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 127.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -1.244 | 1.771 | 13 | 0.346 | 0.8823 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.317 | 2.548 | 0.1506 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2205593 | 0.2205593 | 1 | 1.548 | 0.2354 | Non-Significant Effect |
| Error | 1.852122 | 0.1424709 | 13 | | | |
| Total | 2.072681 | 0.3630303 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.597 | 10.79 | 0.1399 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.95 | 0.8328 | 0.5237 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | -89.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-1494-0340 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 153.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -2.288 | 1.771 | 13 | 0.415 | 0.9802 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.129 | 2.548 | 0.3129 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.073662 | 1.073662 | 1 | 5.236 | 0.0395 | Significant Effect |
| Error | 2.665459 | 0.2050353 | 13 | | | |
| Total | 3.739121 | 1.278697 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.553 | 10.79 | 0.0531 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9712 | 0.8328 | 0.8761 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-001 | 8 | 0.8077 | 0.5893 | 1.026 | 0 | 1.737 | 0.2031 | 0.5743 | 71.1% | -197.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-5672-6238 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 244.0% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | 88 | | 13 | 0 | 0.9981 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.019 | 2.548 | 0.0016 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.585473 | 3.585473 | 1 | 6.845 | 0.0213 | Significant Effect |
| Error | 6.809038 | 0.5237722 | 13 | | | |
| Total | 10.39451 | 4.109245 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 15.52 | 10.79 | 0.0037 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8216 | 0.8328 | 0.0071 | Non-normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | -361.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-6924-8467 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 134.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | -3.335 | 1.782 | 12 | 0.363 | 0.9970 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.614534 | 1.614534 | 1 | 11.12 | 0.0059 | Significant Effect |
| Error | 1.741788 | 0.145149 | 12 | | | |
| Total | 3.356321 | 1.759683 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.887 | 11.07 | 0.1231 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9729 | 0.8239 | 0.9127 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-012 | 7 | 0.9507 | 0.7679 | 1.133 | 0.2632 | 1.6 | 0.1816 | 0.4805 | 50.55% | -250.2% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-2735-8198 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 205.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | -3.929 | 1.86 | 8 | 0.5574 | 0.9978 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.962 | 2.548 | 0.5491 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.17766 | 5.17766 | 1 | 13.7 | 0.0027 | Significant Effect |
| Error | 4.912594 | 0.3778918 | 13 | | | |
| Total | 10.09025 | 5.555552 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 10.96 | 10.79 | 0.0096 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9396 | 0.8328 | 0.3769 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | -433.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-6361-6706 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 465.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | -3.633 | 1.895 | 7 | 1.264 | 0.9958 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.365 | 2.548 | 0.1220 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 21.91855 | 21.91855 | 1 | 11.49 | 0.0048 | Significant Effect |
| Error | 24.7959 | 1.907377 | 13 | | | |
| Total | 46.71445 | 23.82593 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 58.77 | 10.79 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9366 | 0.8328 | 0.3413 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | -892.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-2331-6047 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 350.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | -3.073 | 1.895 | 7 | 0.9488 | 0.9910 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.815 | 2.548 | 0.8473 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.840232 | 8.840232 | 1 | 8.252 | 0.0131 | Significant Effect |
| Error | 13.9272 | 1.071323 | 13 | | | |
| Total | 22.76743 | 9.911555 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 32.64 | 10.79 | 0.0005 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9326 | 0.8328 | 0.2986 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 0.0% |
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | -566.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-3163-2616 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 59.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 3.1 | 1.833 | 9 | 1.304 | 0.0064 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.943 | 2.355 | 0.3555 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 10.61441 | 10.61441 | 1 | 9.611 | 0.0127 | Significant Effect |
| Error | 9.939445 | 1.104383 | 9 | | | |
| Total | 20.55385 | 11.71879 | 10 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 2.776 | 11.26 | 0.1343 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9471 | 0.7725 | 0.6077 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-017 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7890-9731 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 36.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 5.235 | 1.895 | 7 | 0.7982 | 0.0006 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.38 | 2.586 | 0.1324 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 19.45975 | 19.45975 | 1 | 27.41 | 0.0001 | Significant Effect |
| Error | 9.939445 | 0.7099604 | 14 | | | |
| Total | 29.39919 | 20.16971 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.14 | 8.862 | 0.0036 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8441 | 0.8408 | 0.0112 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-3435-1216 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 36.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 5.235 | 1.895 | 7 | 0.7982 | 0.0006 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.38 | 2.586 | 0.1324 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 19.45975 | 19.45975 | 1 | 27.41 | 0.0001 | Significant Effect |
| Error | 9.939445 | 0.7099604 | 14 | | | |
| Total | 29.39919 | 20.16971 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.14 | 8.862 | 0.0036 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8441 | 0.8408 | 0.0112 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-9305-5892 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 36.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 4.306 | 1.86 | 8 | 0.8115 | 0.0013 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.297 | 2.586 | 0.1862 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 14.12323 | 14.12323 | 1 | 18.54 | 0.0007 | Significant Effect |
| Error | 10.66594 | 0.7618529 | 14 | | | |
| Total | 24.78917 | 14.88508 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 13.68 | 8.885 | 0.0027 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9483 | 0.8408 | 0.4625 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-014 | 8 | 0.3266 | 0.2041 | 0.4492 | 0 | 0.8667 | 0.1139 | 0.3222 | 98.63% | 85.19% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7410-0130 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 35.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | 3.798 | 1.761 | 14 | 0.7845 | 0.0010 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.251 | 2.586 | 0.2232 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 11.44804 | 11.44804 | 1 | 14.43 | 0.0020 | Significant Effect |
| Error | 11.10899 | 0.7934996 | 14 | | | |
| Total | 22.55703 | 12.24154 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.499 | 8.885 | 0.0114 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9669 | 0.8408 | 0.7858 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-013 | 8 | 0.5139 | 0.3584 | 0.6694 | 0 | 1.105 | 0.1445 | 0.4088 | 79.54% | 76.7% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-7578-3482 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 1.983 | 1.761 | 14 | 0.8289 | 0.0337 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.131 | 2.586 | 0.3468 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.481996 | 3.481996 | 1 | 3.931 | 0.0674 | Non-Significant Effect |
| Error | 12.40146 | 0.8858187 | 14 | | | |
| Total | 15.88346 | 4.367815 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.037 | 8.885 | 0.0857 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9666 | 0.8408 | 0.7814 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-011 | 8 | 1.273 | 1.047 | 1.498 | 0 | 2 | 0.2097 | 0.5931 | 46.6% | 42.3% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-4088-0521 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 109.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 1.745 | 1.895 | 7 | 2.395 | 0.0622 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.738 | 2.215 | 0.5146 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.324389 | 4.324389 | 1 | 3.046 | 0.1245 | Non-Significant Effect |
| Error | 9.939445 | 1.419921 | 7 | | | |
| Total | 14.26383 | 5.744309 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9801 | 0.7007 | 0.9650 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-6695-4200 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 35.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | 3.581 | 1.761 | 14 | 0.7837 | 0.0015 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.253 | 2.586 | 0.2214 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 10.1573 | 10.1573 | 1 | 12.83 | 0.0030 | Significant Effect |
| Error | 11.08778 | 0.7919844 | 14 | | | |
| Total | 21.24509 | 10.94929 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.656 | 8.885 | 0.0108 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9662 | 0.8408 | 0.7733 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-004 | 8 | 0.6121 | 0.4581 | 0.7662 | 0.1333 | 1.313 | 0.1432 | 0.405 | 66.17% | 72.25% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-1718-8532 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 36.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | 3.742 | 1.761 | 14 | 0.7959 | 0.0011 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.219 | 2.586 | 0.2523 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 11.4396 | 11.4396 | 1 | 14.01 | 0.0022 | Significant Effect |
| Error | 11.43514 | 0.8167958 | 14 | | | |
| Total | 22.87474 | 12.25639 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.645 | 8.885 | 0.0231 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9711 | 0.8408 | 0.8569 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-002 | 8 | 0.5145 | 0.3387 | 0.6904 | 0 | 1.357 | 0.1634 | 0.4622 | 89.84% | 76.67% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-2032-2119 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 2.989 | 1.761 | 14 | 0.8237 | 0.0049 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.144 | 2.586 | 0.3311 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 7.816629 | 7.816629 | 1 | 8.934 | 0.0098 | Significant Effect |
| Error | 12.24848 | 0.8748914 | 14 | | | |
| Total | 20.06511 | 8.691521 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.305 | 8.885 | 0.0731 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9707 | 0.8408 | 0.8495 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-001 | 8 | 0.8077 | 0.5893 | 1.026 | 0 | 1.737 | 0.2031 | 0.5743 | 71.1% | 63.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-1653-8037 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 43.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 1.764 | 1.761 | 14 | 0.9529 | 0.0498 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.014 | 2.586 | 0.5105 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.641891 | 3.641891 | 1 | 3.11 | 0.0996 | Non-Significant Effect |
| Error | 16.39206 | 1.170861 | 14 | | | |
| Total | 20.03395 | 4.812752 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.54 | 8.885 | 0.5827 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9494 | 0.8408 | 0.4795 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-012 | 8 | 1.251 | 0.8863 | 1.617 | 0.2632 | 3.357 | 0.3394 | 0.9601 | 76.72% | 43.26% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-0766-0114 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 40.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 1.487 | 1.761 | 14 | 0.8961 | 0.0796 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.971 | 2.586 | 0.5852 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.28934 | 2.28934 | 1 | 2.211 | 0.1592 | Non-Significant Effect |
| Error | 14.49561 | 1.035401 | 14 | | | |
| Total | 16.78495 | 3.324741 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.182 | 8.885 | 0.3251 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9724 | 0.8408 | 0.8751 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-010 | 8 | 1.449 | 1.142 | 1.756 | 0.5714 | 2.611 | 0.2852 | 0.8068 | 55.67% | 34.3% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-7378-2377 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 62.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | -0.6239 | 1.761 | 14 | 1.38 | 0.7286 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.079 | 2.586 | 0.4133 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9558542 | 0.9558542 | 1 | 0.3892 | 0.5427 | Non-Significant Effect |
| Error | 34.37892 | 2.455637 | 14 | | | |
| Total | 35.33477 | 3.411491 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.459 | 8.885 | 0.2582 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9753 | 0.8408 | 0.9156 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-009 | 8 | 2.694 | 1.984 | 3.405 | 0.375 | 5.842 | 0.6606 | 1.869 | 69.35% | -22.16% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3883-9238 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 51.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 0.6102 | 1.761 | 14 | 1.141 | 0.2757 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.547 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.6253002 | 0.6253002 | 1 | 0.3724 | 0.5515 | Non-Significant Effect |
| Error | 23.51022 | 1.679302 | 14 | | | |
| Total | 24.13552 | 2.304602 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.365 | 8.885 | 0.6915 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9363 | 0.8408 | 0.3062 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-008 | 8 | 1.81 | 1.281 | 2.34 | 0 | 3.235 | 0.4923 | 1.392 | 76.91% | 17.93% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-5423-3343 | **Endpoint:** | Reproduction | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes reproduction endpoint | 37.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 4.485 | 1.895 | 7 | 0.817 | 0.0014 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.259 | 2.548 | 0.1911 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 13.96665 | 13.96665 | 1 | 17.63 | 0.0010 | Significant Effect |
| Error | 10.29587 | 0.7919901 | 13 | | | |
| Total | 24.26253 | 14.75865 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 23.9 | 10.79 | 0.0011 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9366 | 0.8328 | 0.3418 | Normal Distribution |

**Reproduction Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 2.206 | 1.752 | 2.659 | 0.2857 | 4.143 | 0.4213 | 1.192 | 54.02% | 0.0% |
| 19830-003 | 7 | 0.2715 | 0.1788 | 0.3642 | 0 | 0.6429 | 0.09212 | 0.2437 | 89.78% | 87.69% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-0690-3308 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 55.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-011 | -0.1168 | 1.761 | 14 | 1.178 | 0.5456 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.399 | 2.586 | 0.1218 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0243887 | 0.0243887 | 1 | 0.01363 | 0.9087 | Non-Significant Effect |
| Error | 25.04787 | 1.789134 | 14 | | | |
| Total | 25.07226 | 1.813522 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.68 | 8.885 | 0.5102 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9631 | 0.8408 | 0.7175 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-011 | 8 | 2.2 | 1.761 | 2.64 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | -3.68% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-4710-4479 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 46.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 2.122 | 1.761 | 14 | 1.035 | 0.0261 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.731 | 2.586 | 0.0221 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.216094 | 6.216094 | 1 | 4.501 | 0.0522 | Non-Significant Effect |
| Error | 19.33278 | 1.380913 | 14 | | | |
| Total | 25.54887 | 7.597007 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.322 | 8.885 | 0.0724 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9092 | 0.8408 | 0.1129 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 58.74% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-1620-8762 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-013 | 1.938 | 1.771 | 13 | 0.7345 | 0.0373 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.411664 | 2.411664 | 1 | 3.755 | 0.0747 | Non-Significant Effect |
| Error | 8.349029 | 0.642233 | 13 | | | |
| Total | 10.76069 | 3.053896 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.515 | 9.155 | 0.5965 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9756 | 0.8328 | 0.9304 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 47.86% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-4937-3888 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 46.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 2.964 | 1.761 | 14 | 0.9841 | 0.0051 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.872 | 2.586 | 0.0087 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 10.97457 | 10.97457 | 1 | 8.788 | 0.0102 | Significant Effect |
| Error | 17.48349 | 1.248821 | 14 | | | |
| Total | 28.45806 | 12.22339 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.805 | 8.885 | 0.0103 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8762 | 0.8408 | 0.0339 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 78.05% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-9227-7768 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 38.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-014 | 3.316 | 1.771 | 13 | 0.6481 | 0.0028 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.497814 | 5.497814 | 1 | 11 | 0.0056 | Significant Effect |
| Error | 6.499737 | 0.4999798 | 13 | | | |
| Total | 11.99755 | 5.997794 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.086 | 9.155 | 0.1662 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9569 | 0.8328 | 0.6389 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 72.27% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 16-2932-5852 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-015 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.03 | 2.586 | 0.0024 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 18.01316 | 18.01316 | 1 | 16.06 | 0.0013 | Significant Effect |
| Error | 15.70044 | 1.12146 | 14 | | | |
| Total | 33.7136 | 19.13462 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.739 | 8.862 | 0.0211 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7661 | 0.8408 | 0.0010 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-8706-2561 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:27 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 3.03 | 2.586 | 0.0024 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 18.01316 | 18.01316 | 1 | 16.06 | 0.0013 | Significant Effect |
| Error | 15.70044 | 1.12146 | 14 | | | |
| Total | 33.7136 | 19.13462 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.739 | 8.862 | 0.0211 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7661 | 0.8408 | 0.0010 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-2578-0496 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 32.9% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-016 | 36 | | 13 | 0 | 0.0002 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 10.52719 | 10.52719 | 1 | 29.01 | 0.0001 | Significant Effect |
| Error | 4.716688 | 0.3628222 | 13 | | | |
| Total | 15.24388 | 10.89001 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 17.48 | 9.33 | 0.0013 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8095 | 0.8328 | 0.0049 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-7256-6396 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 5.1% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 21 | | 12 | 0 | 0.0003 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.821 | 2.507 | 0.0059 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 15.43986 | 15.43986 | 1 | 11.8 | 0.0049 | Significant Effect |
| Error | 15.70044 | 1.30837 | 12 | | | |
| Total | 31.1403 | 16.74823 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 4.951 | 9.33 | 0.0460 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8032 | 0.8239 | 0.0055 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-7901-5166 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:26 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 38.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-017 | 5.011 | 1.943 | 6 | 0.6512 | 0.0012 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 9.110066 | 9.110066 | 1 | 21.25 | 0.0008 | Significant Effect |
| Error | 4.716688 | 0.4287899 | 11 | | | |
| Total | 13.82675 | 9.538857 | 12 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.75 | 10.04 | 0.0051 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8552 | 0.8138 | 0.0333 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-4699-4655 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 6.17% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-001 | 0.7339 | 1.761 | 14 | 1.309 | 0.2376 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.185 | 2.586 | 0.2854 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.189443 | 1.189443 | 1 | 0.5386 | 0.4751 | Non-Significant Effect |
| Error | 30.9203 | 2.208593 | 14 | | | |
| Total | 32.10974 | 3.398035 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.032 | 8.885 | 0.9683 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8671 | 0.8408 | 0.0246 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-001 | 8 | 1.577 | 1.016 | 2.138 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | 25.7% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-5458-9599 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 5.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 2.043 | 1.761 | 14 | 1.081 | 0.0302 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.613 | 2.586 | 0.0433 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.292189 | 6.292189 | 1 | 4.172 | 0.0604 | Non-Significant Effect |
| Error | 21.11313 | 1.508081 | 14 | | | |
| Total | 27.40532 | 7.80027 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.901 | 8.885 | 0.1834 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8938 | 0.8408 | 0.0640 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 59.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-5075-0441 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 48.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-002 | 1.776 | 1.771 | 13 | 0.809 | 0.0496 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 2.45753 | 2.45753 | 1 | 3.154 | 0.0991 | Non-Significant Effect |
| Error | 10.12938 | 0.7791833 | 13 | | | |
| Total | 12.58691 | 3.236714 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.017 | 9.155 | 0.9675 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9329 | 0.8328 | 0.3014 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 48.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-3191-0746 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 47.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 2.048 | 1.761 | 14 | 1.002 | 0.0299 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.821 | 2.586 | 0.0124 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.424488 | 5.424488 | 1 | 4.192 | 0.0598 | Non-Significant Effect |
| Error | 18.11402 | 1.293859 | 14 | | | |
| Total | 23.53851 | 6.718347 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.505 | 8.885 | 0.0245 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8976 | 0.8408 | 0.0736 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 54.88% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-0215-8556 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-004 | 1.883 | 1.771 | 13 | 0.6788 | 0.0412 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.944247 | 1.944247 | 1 | 3.545 | 0.0823 | Non-Significant Effect |
| Error | 7.130272 | 0.5484825 | 13 | | | |
| Total | 9.074519 | 2.49273 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.28 | 9.155 | 0.3051 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.986 | 0.8328 | 0.9951 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 42.98% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-2843-9759 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:25 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 142.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-012 | | 19830-005 | 1.336 | 1.895 | 7 | 3.01 | 0.1117 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.213 | 2.215 | 0.0508 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.002925 | 4.002925 | 1 | 1.785 | 0.2234 | Non-Significant Effect |
| Error | 15.70044 | 2.24292 | 7 | | | |
| Total | 19.70337 | 6.245845 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.8877 | 0.7007 | 0.1890 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-0827-8779 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 37.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-015 | 4.692 | 1.761 | 14 | 0.9186 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.285 | 2.586 | 0.1953 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 23.95003 | 23.95003 | 1 | 22.01 | 0.0003 | Significant Effect |
| Error | 15.23347 | 1.088105 | 14 | | | |
| Total | 39.18349 | 25.03813 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.842 | 8.862 | 0.0203 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8694 | 0.8408 | 0.0267 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-2032-9808 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:24 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 37.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-016 | 4.692 | 1.761 | 14 | 0.9186 | 0.0002 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.285 | 2.586 | 0.1953 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 23.95003 | 23.95003 | 1 | 22.01 | 0.0003 | Significant Effect |
| Error | 15.23347 | 1.088105 | 14 | | | |
| Total | 39.18349 | 25.03813 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.842 | 8.862 | 0.0203 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8694 | 0.8408 | 0.0267 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-8048-6085 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 44.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-017 | 4.021 | 1.782 | 12 | 1.085 | 0.0008 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.128 | 2.507 | 0.2789 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 20.52859 | 20.52859 | 1 | 16.17 | 0.0017 | Significant Effect |
| Error | 15.23347 | 1.269456 | 12 | | | |
| Total | 35.76206 | 21.79805 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 5.027 | 9.33 | 0.0446 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8901 | 0.8239 | 0.0810 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-9505-8306 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 39.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-014 | 3.594 | 1.761 | 14 | 0.9709 | 0.0015 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.162 | 2.586 | 0.3100 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 15.70119 | 15.70119 | 1 | 12.92 | 0.0029 | Significant Effect |
| Error | 17.01652 | 1.215466 | 14 | | | |
| Total | 32.71771 | 16.91666 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 8.543 | 8.885 | 0.0112 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9303 | 0.8408 | 0.2465 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 80.97% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-0832-0164 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 121.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-005 | 1.564 | 1.895 | 7 | 2.964 | 0.0809 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.669 | 2.215 | 0.6425 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 5.322228 | 5.322228 | 1 | 2.446 | 0.1618 | Non-Significant Effect |
| Error | 15.23347 | 2.17621 | 7 | | | |
| Total | 20.5557 | 7.498438 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.8722 | 0.7007 | 0.1296 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 18-6982-9315 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:23 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 47.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-011 | 0.3724 | 1.761 | 14 | 1.167 | 0.3576 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.799 | 2.586 | 0.9605 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2435576 | 0.2435576 | 1 | 0.1387 | 0.7151 | Non-Significant Effect |
| Error | 24.5809 | 1.755779 | 14 | | | |
| Total | 24.82446 | 1.999336 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.63 | 8.885 | 0.5349 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9691 | 0.8408 | 0.8237 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-011 | 8 | 2.2 | 1.761 | 2.64 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | 10.08% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-0891-4810 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 41.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-013 | 2.707 | 1.761 | 14 | 1.022 | 0.0085 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.054 | 2.586 | 0.4497 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 9.877782 | 9.877782 | 1 | 7.33 | 0.0170 | Significant Effect |
| Error | 18.86581 | 1.347558 | 14 | | | |
| Total | 28.74359 | 11.22534 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.194 | 8.885 | 0.0780 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9159 | 0.8408 | 0.1448 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 64.22% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-2660-3028 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.5% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-012 | 0.4371 | 1.761 | 14 | 1.309 | 0.3344 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.159 | 2.586 | 0.3140 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4220898 | 0.4220898 | 1 | 0.191 | 0.6687 | Non-Significant Effect |
| Error | 30.93391 | 2.209565 | 14 | | | |
| Total | 31.356 | 2.631655 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.031 | 8.885 | 0.9693 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8891 | 0.8408 | 0.0538 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 13.28% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-8541-3336 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:22 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.1% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-001 | 1.18 | 1.761 | 14 | 1.299 | 0.1288 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.202 | 2.586 | 0.2685 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 3.028644 | 3.028644 | 1 | 1.392 | 0.2577 | Non-Significant Effect |
| Error | 30.45333 | 2.175238 | 14 | | | |
| Total | 33.48197 | 5.203882 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.001 | 8.885 | 0.9991 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8968 | 0.8408 | 0.0714 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-001 | 8 | 1.577 | 1.016 | 2.138 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | 35.56% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-8501-5618 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-002 | 2.601 | 1.761 | 14 | 1.069 | 0.0105 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.963 | 2.586 | 0.5989 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 9.973645 | 9.973645 | 1 | 6.763 | 0.0210 | Significant Effect |
| Error | 20.64617 | 1.474726 | 14 | | | |
| Total | 30.61981 | 11.44837 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.814 | 8.885 | 0.1956 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8908 | 0.8408 | 0.0574 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 64.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-8121-9257 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:21 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-010 | | 19830-004 | 2.653 | 1.761 | 14 | 0.9887 | 0.0095 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.123 | 2.586 | 0.3556 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.872875 | 8.872875 | 1 | 7.039 | 0.0189 | Significant Effect |
| Error | 17.64705 | 1.260504 | 14 | | | |
| Total | 26.51993 | 10.13338 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.312 | 8.885 | 0.0266 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9301 | 0.8408 | 0.2445 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 60.87% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-8541-6541 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 49.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-014 | 3.504 | 1.895 | 7 | 2.578 | 0.0050 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.231 | 2.586 | 0.2413 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 90.97874 | 90.97874 | 1 | 12.28 | 0.0035 | Significant Effect |
| Error | 103.709 | 7.407783 | 14 | | | |
| Total | 194.6877 | 98.38653 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 57.16 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8968 | 0.8408 | 0.0714 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 91.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-4011-4215 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 48.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-015 | 3.88 | 1.895 | 7 | 2.556 | 0.0030 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.25 | 2.586 | 0.2241 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 109.6142 | 109.6142 | 1 | 15.06 | 0.0017 | Significant Effect |
| Error | 101.9259 | 7.280422 | 14 | | | |
| Total | 211.5401 | 116.8946 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.4 | 8.862 | 0.0034 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8494 | 0.8408 | 0.0133 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-5685-8802 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 48.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-016 | 3.88 | 1.895 | 7 | 2.556 | 0.0030 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.25 | 2.586 | 0.2241 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 109.6142 | 109.6142 | 1 | 15.06 | 0.0017 | Significant Effect |
| Error | 101.9259 | 7.280422 | 14 | | | |
| Total | 211.5401 | 116.8946 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 12.4 | 8.862 | 0.0034 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8494 | 0.8408 | 0.0133 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 21-3820-5346 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:18 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-017 | 3.326 | 1.782 | 12 | 2.805 | 0.0030 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.095 | 2.507 | 0.3148 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 93.95505 | 93.95505 | 1 | 11.06 | 0.0060 | Significant Effect |
| Error | 101.9259 | 8.493826 | 12 | | | |
| Total | 195.881 | 102.4489 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 9.109 | 9.33 | 0.0107 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8824 | 0.8239 | 0.0629 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-9006-8180 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 146.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-005 | 1.293 | 1.895 | 7 | 7.668 | 0.1185 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.643 | 2.215 | 0.6950 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 24.35872 | 24.35872 | 1 | 1.673 | 0.2369 | Non-Significant Effect |
| Error | 101.9259 | 14.56084 | 7 | | | |
| Total | 126.2846 | 38.91956 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.9345 | 0.7007 | 0.5252 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-7649-4896 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-011 | 2.153 | 1.86 | 8 | 2.621 | 0.0317 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.153 | 2.586 | 0.3200 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 36.83665 | 36.83665 | 1 | 4.635 | 0.0493 | Significant Effect |
| Error | 111.2733 | 7.948096 | 14 | | | |
| Total | 148.11 | 44.78474 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 10.9 | 8.885 | 0.0054 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9421 | 0.8408 | 0.3756 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-011 | 8 | 2.2 | 1.761 | 2.64 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | 57.97% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-7994-2990 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:17 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 49.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-013 | 3.175 | 1.895 | 7 | 2.601 | 0.0078 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.211 | 2.586 | 0.2597 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 76.01571 | 76.01571 | 1 | 10.08 | 0.0067 | Significant Effect |
| Error | 105.5583 | 7.539875 | 14 | | | |
| Total | 181.574 | 83.55559 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 28.06 | 8.885 | 0.0003 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9163 | 0.8408 | 0.1471 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 83.28% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7012-2034 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 46.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-012 | 2.148 | 1.761 | 14 | 2.553 | 0.0249 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.094 | 2.586 | 0.3925 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 38.75671 | 38.75671 | 1 | 4.613 | 0.0497 | Significant Effect |
| Error | 117.6264 | 8.401882 | 14 | | | |
| Total | 156.3831 | 47.1586 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.492 | 8.885 | 0.0246 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9424 | 0.8408 | 0.3792 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 59.46% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-7436-4061 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 46.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-010 | 1.927 | 1.761 | 14 | 2.548 | 0.0372 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.099 | 2.586 | 0.3870 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 31.0896 | 31.0896 | 1 | 3.715 | 0.0745 | Non-Significant Effect |
| Error | 117.1594 | 8.368527 | 14 | | | |
| Total | 148.249 | 39.45813 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.691 | 8.885 | 0.0226 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9446 | 0.8408 | 0.4091 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 53.26% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-2833-2719 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 46.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-001 | 2.529 | 1.761 | 14 | 2.547 | 0.0120 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.099 | 2.586 | 0.3868 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 53.52539 | 53.52539 | 1 | 6.397 | 0.0241 | Significant Effect |
| Error | 117.1458 | 8.367555 | 14 | | | |
| Total | 170.6712 | 61.89294 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.697 | 8.885 | 0.0226 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9444 | 0.8408 | 0.4058 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-001 | 8 | 1.577 | 1.016 | 2.138 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | 69.88% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-9505-7930 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-002 | 3.154 | 1.895 | 7 | 2.623 | 0.0080 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.193 | 2.586 | 0.2779 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 76.28123 | 76.28123 | 1 | 9.949 | 0.0070 | Significant Effect |
| Error | 107.3386 | 7.667043 | 14 | | | |
| Total | 183.6198 | 83.94827 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 18.83 | 8.885 | 0.0010 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9209 | 0.8408 | 0.1746 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 83.42% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-1958-1819 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:16 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 49.4% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-009 | | 19830-004 | 3.134 | 1.895 | 7 | 2.586 | 0.0083 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.224 | 2.586 | 0.2475 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 73.18019 | 73.18019 | 1 | 9.819 | 0.0073 | Significant Effect |
| Error | 104.3395 | 7.452821 | 14 | | | |
| Total | 177.5197 | 80.63301 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 42.23 | 8.885 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9084 | 0.8408 | 0.1098 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 81.71% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-5959-0690 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-011 | 1.262 | 1.761 | 14 | 1.892 | 0.1138 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.713 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 7.349928 | 7.349928 | 1 | 1.592 | 0.2277 | Non-Significant Effect |
| Error | 64.63737 | 4.616955 | 14 | | | |
| Total | 71.9873 | 11.96688 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 5.915 | 8.885 | 0.0318 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9468 | 0.8408 | 0.4404 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-011 | 8 | 2.2 | 1.761 | 2.64 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | 38.12% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 19-2267-6505 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 54.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-013 | 2.613 | 1.895 | 7 | 1.943 | 0.0174 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.794 | 2.586 | 0.9737 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 28.73446 | 28.73446 | 1 | 6.827 | 0.0205 | Significant Effect |
| Error | 58.92228 | 4.208734 | 14 | | | |
| Total | 87.65674 | 32.9432 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 15.22 | 8.885 | 0.0019 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9457 | 0.8408 | 0.4247 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 75.38% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-1363-6284 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 50.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-014 | 3.061 | 1.895 | 7 | 1.913 | 0.0092 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.823 | 2.586 | 0.8999 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 38.1928 | 38.1928 | 1 | 9.369 | 0.0085 | Significant Effect |
| Error | 57.07298 | 4.076642 | 14 | | | |
| Total | 95.26579 | 42.26944 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 31.01 | 8.885 | 0.0002 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.934 | 0.8408 | 0.2822 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 86.9% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-8408-6145 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 52.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-015 | 3.578 | 1.895 | 7 | 1.883 | 0.0045 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.852 | 2.586 | 0.8297 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 50.57252 | 50.57252 | 1 | 12.81 | 0.0030 | Significant Effect |
| Error | 55.28994 | 3.949281 | 14 | | | |
| Total | 105.8625 | 54.5218 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 45.69 | 8.862 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8786 | 0.8408 | 0.0369 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-7909-8440 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:15 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 52.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-016 | 3.578 | 1.895 | 7 | 1.883 | 0.0045 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.852 | 2.586 | 0.8297 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 50.57252 | 50.57252 | 1 | 12.81 | 0.0030 | Significant Effect |
| Error | 55.28994 | 3.949281 | 14 | | | |
| Total | 105.8625 | 54.5218 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 45.69 | 8.862 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8786 | 0.8408 | 0.0369 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-1303-1940 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:14 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 52.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-017 | 3.578 | 1.895 | 7 | 1.883 | 0.0045 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.724 | 2.507 | 0.9954 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 43.34787 | 43.34787 | 1 | 9.408 | 0.0098 | Significant Effect |
| Error | 55.28994 | 4.607495 | 12 | | | |
| Total | 98.63781 | 47.95537 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 33.57 | 9.33 | <0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8988 | 0.8239 | 0.1084 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-6178-6447 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 159.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-005 | 1.193 | 1.895 | 7 | 5.648 | 0.1359 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.353 | 2.215 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 11.23834 | 11.23834 | 1 | 1.423 | 0.2718 | Non-Significant Effect |
| Error | 55.28994 | 7.898562 | 7 | | | |
| Total | 66.52827 | 19.1369 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.8803 | 0.7007 | 0.1583 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-2877-2401 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 54.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-004 | 2.56 | 1.895 | 7 | 1.923 | 0.0188 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.813 | 2.586 | 0.9250 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 27.0015 | 27.0015 | 1 | 6.551 | 0.0227 | Significant Effect |
| Error | 57.70352 | 4.12168 | 14 | | | |
| Total | 84.70502 | 31.12318 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 22.91 | 8.885 | 0.0005 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9421 | 0.8408 | 0.3753 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 73.07% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-3301-5243 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:13 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 54.4% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-002 | 2.582 | 1.86 | 8 | 1.936 | 0.0163 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.768 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 28.8978 | 28.8978 | 1 | 6.665 | 0.0217 | Significant Effect |
| Error | 60.70263 | 4.335902 | 14 | | | |
| Total | 89.60043 | 33.2337 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 10.21 | 8.885 | 0.0066 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9368 | 0.8408 | 0.3112 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 75.59% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-4597-8905 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 55.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-001 | 1.764 | 1.761 | 14 | 1.976 | 0.0498 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.64 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 15.66465 | 15.66465 | 1 | 3.11 | 0.0996 | Non-Significant Effect |
| Error | 70.50979 | 5.036414 | 14 | | | |
| Total | 86.17444 | 20.70107 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.633 | 8.885 | 0.1104 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9409 | 0.8408 | 0.3602 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-001 | 8 | 1.577 | 1.016 | 2.138 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | 55.65% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-9457-4533 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 55.8% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-012 | 1.273 | 1.761 | 14 | 1.983 | 0.1118 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.634 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 8.221087 | 8.221087 | 1 | 1.621 | 0.2237 | Non-Significant Effect |
| Error | 70.99038 | 5.070741 | 14 | | | |
| Total | 79.21146 | 13.29183 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.522 | 8.885 | 0.1187 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9356 | 0.8408 | 0.2981 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 40.32% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-2678-6754 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 55.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-010 | 0.988 | 1.761 | 14 | 1.977 | 0.1700 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.64 | 2.586 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.91757 | 4.91757 | 1 | 0.9762 | 0.3399 | Non-Significant Effect |
| Error | 70.52341 | 5.037386 | 14 | | | |
| Total | 75.44098 | 9.954956 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.63 | 8.885 | 0.1106 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9111 | 0.8408 | 0.1214 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 31.18% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-8371-0549 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:12 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 8.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-008 | | 19830-009 | -1.002 | 1.761 | 14 | 2.951 | 0.8334 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.812 | 2.586 | 0.9281 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 11.27781 | 11.27781 | 1 | 1.004 | 0.3333 | Non-Significant Effect |
| Error | 157.2159 | 11.2297 | 14 | | | |
| Total | 168.4937 | 22.50751 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.843 | 8.885 | 0.4383 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.945 | 0.8408 | 0.4148 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 0.0% |
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | -47.22% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-8216-8574 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 76.2% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 2.358 | 1.796 | 11 | 0.3869 | 0.0190 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.676 | 2.462 | 0.0120 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.8334184 | 0.8334184 | 1 | 5.559 | 0.0380 | Significant Effect |
| Error | 1.64903 | 0.1499118 | 11 | | | |
| Total | 2.482449 | 0.9833302 | 12 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.88 | 10.04 | 0.0255 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8188 | 0.8138 | 0.0115 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2874-6347 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 68.4% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-017 | 24 | | 10 | 1 | 0.0076 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.3520226 | 0.3520226 | 1 | 7.03 | 0.0243 | Significant Effect |
| Error | 0.5007249 | 0.05007249 | 10 | | | |
| Total | 0.8527474 | 0.402095 | 11 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 7.461 | 10.04 | 0.0211 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7979 | 0.8025 | 0.0089 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 6 | 0.3426 | 0.2222 | 0.4629 | 0 | 0.9 | 0.1292 | 0.3165 | 92.38% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 03-4642-6004 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 64.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 40 | | 13 | 1 | 0.0019 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.891 | 2.548 | 0.0052 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9630613 | 0.9630613 | 1 | 7.592 | 0.0164 | Significant Effect |
| Error | 1.64903 | 0.1268485 | 13 | | | |
| Total | 2.612092 | 1.08991 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 9.435 | 9.33 | 0.0097 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7822 | 0.8328 | 0.0022 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-6798-7789 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 57.4% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-016 | 40 | | 12 | 1 | 0.0040 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4023115 | 0.4023115 | 1 | 9.641 | 0.0091 | Significant Effect |
| Error | 0.5007249 | 0.04172707 | 12 | | | |
| Total | 0.9030364 | 0.4440385 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 10.23 | 9.33 | 0.0076 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7512 | 0.8239 | 0.0013 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 6 | 0.3426 | 0.2222 | 0.4629 | 0 | 0.9 | 0.1292 | 0.3165 | 92.38% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-9373-3916 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 64.3% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 40 | | 13 | 1 | 0.0019 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.891 | 2.548 | 0.0052 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.9630613 | 0.9630613 | 1 | 7.592 | 0.0164 | Significant Effect |
| Error | 1.64903 | 0.1268485 | 13 | | | |
| Total | 2.612092 | 1.08991 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 9.435 | 9.33 | 0.0097 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7822 | 0.8328 | 0.0022 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-6496-5832 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:11 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 57.4% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-015 | 40 | | 12 | 1 | 0.0040 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4023115 | 0.4023115 | 1 | 9.641 | 0.0091 | Significant Effect |
| Error | 0.5007249 | 0.04172707 | 12 | | | |
| Total | 0.9030364 | 0.4440385 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 10.23 | 9.33 | 0.0076 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.7512 | 0.8239 | 0.0013 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 6 | 0.3426 | 0.2222 | 0.4629 | 0 | 0.9 | 0.1292 | 0.3165 | 92.38% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-6384-1169 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 92.7% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-014 | 0.1587 | 1.771 | 13 | 0.4709 | 0.4382 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.004 | 2.548 | 0.4801 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.006648083 | 0.006648083 | 1 | 0.02518 | 0.8764 | Non-Significant Effect |
| Error | 3.432079 | 0.264006 | 13 | | | |
| Total | 3.438727 | 0.2706541 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.079 | 9.155 | 0.9096 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8678 | 0.8328 | 0.0314 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 8.31% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 08-6816-3466 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 115.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-013 | -1.114 | 1.771 | 13 | 0.5842 | 0.8573 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.683 | 2.548 | 1.0000 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.504459 | 0.504459 | 1 | 1.242 | 0.2853 | Non-Significant Effect |
| Error | 5.28137 | 0.4062592 | 13 | | | |
| Total | 5.785829 | 0.9107183 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.888 | 10.79 | 0.4564 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9311 | 0.8328 | 0.2830 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | -72.37% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-6382-6357 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:10 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 166.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-011 | -3.555 | 1.771 | 13 | 0.843 | 0.9982 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.483 | 2.548 | 0.0702 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 10.69156 | 10.69156 | 1 | 12.64 | 0.0035 | Significant Effect |
| Error | 10.99646 | 0.8458815 | 13 | | | |
| Total | 21.68802 | 11.53744 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 4.859 | 10.79 | 0.0724 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9215 | 0.8328 | 0.2034 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-011 | 8 | 2.2 | 1.761 | 2.64 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | -333.2% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-9901-2907 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 21.4.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-005 | 0.9062 | 1.943 | 6 | 1.089 | 0.1999 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.044 | 2.127 | 0.0922 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.2257175 | 0.2257175 | 1 | 0.8213 | 0.3997 | Non-Significant Effect |
| Error | 1.64903 | 0.2748383 | 6 | | | |
| Total | 1.874748 | 0.5005558 | 7 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.8839 | 0.6451 | 0.2052 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 14-8178-4620 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:09 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 101.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-004 | -1.554 | 1.771 | 13 | 0.5124 | 0.9279 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.842 | 2.548 | 0.7858 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.7548885 | 0.7548885 | 1 | 2.416 | 0.1441 | Non-Significant Effect |
| Error | 4.062614 | 0.3125088 | 13 | | | |
| Total | 4.817502 | 1.067397 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.255 | 10.79 | 0.7981 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9385 | 0.8328 | 0.3636 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | -88.53% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-9404-3972 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 103.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -0.9437 | 1.771 | 13 | 0.6755 | 0.8187 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.6 | 2.548 | 0.0377 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.4837964 | 0.4837964 | 1 | 0.8906 | 0.3625 | Non-Significant Effect |
| Error | 7.061725 | 0.5432096 | 13 | | | |
| Total | 7.545521 | 1.027006 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.813 | 10.79 | 0.2285 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8982 | 0.8328 | 0.0892 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | -70.88% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-3832-3069 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 96.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-002 | -0.3505 | 1.782 | 12 | 0.4893 | 0.6340 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.0323987 | 0.0323987 | 1 | 0.1228 | 0.7321 | Non-Significant Effect |
| Error | 3.165498 | 0.2637915 | 12 | | | |
| Total | 3.197897 | 0.2961902 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.087 | 11.07 | 0.9216 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9302 | 0.8239 | 0.3074 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-002 | 7 | 0.6041 | 0.4129 | 0.7953 | 0 | 1.2 | 0.19 | 0.5027 | 83.22% | -18.94% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-6603-7788 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 206.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -1.813 | 1.771 | 13 | 1.044 | 0.9535 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.858 | 2.548 | 0.0067 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.265411 | 4.265411 | 1 | 3.287 | 0.0930 | Non-Significant Effect |
| Error | 16.86889 | 1.297607 | 13 | | | |
| Total | 21.1343 | 5.563018 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 7.911 | 10.79 | 0.0223 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8692 | 0.8328 | 0.0328 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-001 | 8 | 1.577 | 1.016 | 2.138 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | -210.5% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 02-9921-8616 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 128.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-001 | -1.697 | 1.782 | 12 | 0.6519 | 0.9423 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 1.348326 | 1.348326 | 1 | 2.88 | 0.1155 | Non-Significant Effect |
| Error | 5.618724 | 0.468227 | 12 | | | |
| Total | 6.96705 | 1.816553 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.407 | 11.07 | 0.3091 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9634 | 0.8239 | 0.7783 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-001 | 7 | 1.129 | 0.8192 | 1.438 | 0 | 2.1 | 0.3074 | 0.8134 | 72.07% | -122.2% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-7264-6122 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:08 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 107.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-012 | -3.009 | 1.782 | 12 | 0.6939 | 0.9946 | Non-Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 4.80197 | 4.80197 | 1 | 9.052 | 0.0109 | Significant Effect |
| Error | 6.365718 | 0.5304765 | 12 | | | |
| Total | 11.16769 | 5.332446 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 2.86 | 11.07 | 0.2266 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9615 | 0.8239 | 0.7481 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-012 | 7 | 1.679 | 1.342 | 2.016 | 0.4167 | 3.2 | 0.3351 | 0.8866 | 52.8% | -230.6% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 17-7204-4556 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 206.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-010 | -3.288 | 1.771 | 13 | 1.044 | 0.9971 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.097 | 2.548 | 0.3505 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 14.03684 | 14.03684 | 1 | 10.81 | 0.0059 | Significant Effect |
| Error | 16.8825 | 1.298654 | 13 | | | |
| Total | 30.91934 | 15.33549 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 7.918 | 10.79 | 0.0223 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9248 | 0.8328 | 0.2282 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | -381.8% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 09-9011-7593 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 509.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-009 | -3.467 | 1.895 | 7 | 2.583 | 0.9948 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.156 | 2.548 | 0.2836 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 83.41746 | 83.41746 | 1 | 10.47 | 0.0065 | Significant Effect |
| Error | 103.5749 | 7.967303 | 13 | | | |
| Total | 186.9924 | 91.38476 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 52.98 | 10.79 | 0.0001 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9057 | 0.8328 | 0.1163 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | -930.7% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-7485-8671 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:07 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 37.8.0% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-003 | | 19830-008 | -3.008 | 1.895 | 7 | 1.92 | 0.9901 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.763 | 2.548 | 0.9768 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 34.67965 | 34.67965 | 1 | 7.918 | 0.0146 | Significant Effect |
| Error | 56.93896 | 4.37992 | 13 | | | |
| Total | 91.61861 | 39.05957 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 28.74 | 10.79 | 0.0007 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9344 | 0.8328 | 0.3168 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 0.0% |
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | -600.1% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-0876-9480 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-017 | 4.115 | 1.782 | 12 | 2.105 | 0.0007 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.447 | 2.507 | 0.0689 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 80.95239 | 80.95239 | 1 | 16.93 | 0.0014 | Significant Effect |
| Error | 57.37727 | 4.78144 | 12 | | | |
| Total | 138.3297 | 85.73383 | 13 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 6.299 | 9.33 | 0.0274 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8468 | 0.8239 | 0.0201 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-017 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 13-2667-7509 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 36.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.629 | 2.586 | 0.0398 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 94.44446 | 94.44446 | 1 | 23.04 | 0.0003 | Significant Effect |
| Error | 57.37727 | 4.098377 | 14 | | | |
| Total | 151.8217 | 98.54283 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.574 | 8.862 | 0.0110 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.805 | 0.8408 | 0.0032 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 05-8293-1973 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 37.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-016 | 5.128 | 1.943 | 6 | 1.563 | 0.0011 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 63.51627 | 63.51627 | 1 | 30.39 | 0.0001 | Significant Effect |
| Error | 27.17319 | 2.090245 | 13 | | | |
| Total | 90.68946 | 65.60651 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 11.27 | 9.33 | 0.0057 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.836 | 0.8328 | 0.0111 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 7 | 4.125 | 3.315 | 4.934 | 0.5714 | 6.444 | 0.8044 | 2.128 | 51.59% | 0.0% |
| 19830-016 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-9408-7952 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Nonparametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 36.7% |

**Wilcoxon Rank Sum Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | Ties | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 36 | | 14 | 0 | <0.0001 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.629 | 2.586 | 0.0398 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 94.44446 | 94.44446 | 1 | 23.04 | 0.0003 | Significant Effect |
| Error | 57.37727 | 4.098377 | 14 | | | |
| Total | 151.8217 | 98.54283 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 8.574 | 8.862 | 0.0110 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.805 | 0.8408 | 0.0032 | Non-normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-6794-6686 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 37.9% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-015 | 5.128 | 1.943 | 6 | 1.563 | 0.0011 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 63.51627 | 63.51627 | 1 | 30.39 | 0.0001 | Significant Effect |
| Error | 27.17319 | 2.090245 | 13 | | | |
| Total | 90.68946 | 65.60651 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Mod Levene Equality of Variance | 11.27 | 9.33 | 0.0057 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.836 | 0.8328 | 0.0111 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 7 | 4.125 | 3.315 | 4.934 | 0.5714 | 6.444 | 0.8044 | 2.128 | 51.59% | 0.0% |
| 19830-015 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 12-9478-0203 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.1% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 4.274 | 1.895 | 7 | 1.947 | 0.0018 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.589 | 2.586 | 0.0492 | Outlier Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 77.20875 | 77.20875 | 1 | 18.27 | 0.0008 | Significant Effect |
| Error | 59.16032 | 4.225738 | 14 | | | |
| Total | 136.3691 | 81.43449 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 32.18 | 8.885 | 0.0002 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8791 | 0.8408 | 0.0375 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 90.42% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 00-2533-3950 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:06 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoints | 36.8% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-014 | 4.441 | 1.943 | 6 | 1.601 | 0.0022 | Significant Effect |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 49.98332 | 49.98332 | 1 | 22.44 | 0.0004 | Significant Effect |
| Error | 28.95624 | 2.227403 | 13 | | | |
| Total | 78.93956 | 52.21072 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 17.78 | 9.155 | 0.0013 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9234 | 0.8328 | 0.2172 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 7 | 4.125 | 3.315 | 4.934 | 0.5714 | 6.444 | 0.8044 | 2.128 | 51.59% | 0.0% |
| 19830-014 | 8 | 0.4657 | 0.2737 | 0.6577 | 0 | 1.444 | 0.1784 | 0.5047 | 108.4% | 88.71% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 06-5455-4619 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.7% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-013 | 3.817 | 1.895 | 7 | 1.978 | 0.0033 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.549 | 2.586 | 0.0603 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 63.47742 | 63.47742 | 1 | 14.57 | 0.0019 | Significant Effect |
| Error | 61.00962 | 4.35783 | 14 | | | |
| Total | 124.487 | 67.83524 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 15.8 | 8.885 | 0.0017 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9055 | 0.8408 | 0.0986 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-013 | 8 | 0.8755 | 0.6015 | 1.149 | 0 | 1.909 | 0.2547 | 0.7204 | 82.28% | 81.98% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 15-5034-2964 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 39.6% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-011 | 2.436 | 1.761 | 14 | 1.923 | 0.0144 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.437 | 2.586 | 0.1027 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 28.27999 | 28.27999 | 1 | 5.934 | 0.0288 | Significant Effect |
| Error | 66.72471 | 4.76605 | 14 | | | |
| Total | 95.0047 | 33.04604 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 6.138 | 8.885 | 0.0288 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9393 | 0.8408 | 0.3403 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-011 | 8 | 2.2 | 1.761 | 2.64 | 0 | 3.714 | 0.4086 | 1.156 | 52.52% | 54.72% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-5908-6370 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:05 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 118.0% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-005 | 1.6 | 1.895 | 7 | 5.753 | 0.0768 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.92 | 2.215 | 0.2588 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 20.98766 | 20.98766 | 1 | 2.56 | 0.1536 | Non-Significant Effect |
| Error | 57.37727 | 8.196754 | 7 | | | |
| Total | 78.36493 | 29.18441 | 8 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Distribution | Shapiro-Wilk W Normality | 0.952 | 0.7007 | 0.7125 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-005 | 1 | 0 | | | 0 | 0 | 0 | 0 | | 100.0% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 11-0145-0696 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.3% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-004 | 3.776 | 1.895 | 7 | 1.958 | 0.0035 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.575 | 2.586 | 0.0529 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 60.8886 | 60.8886 | 1 | 14.26 | 0.0020 | Significant Effect |
| Error | 59.79086 | 4.270776 | 14 | | | |
| Total | 120.6795 | 65.15938 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 23.77 | 8.885 | 0.0005 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8906 | 0.8408 | 0.0568 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-004 | 8 | 0.9576 | 0.7342 | 1.181 | 0.2143 | 1.909 | 0.2076 | 0.5872 | 61.32% | 80.29% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-7567-4590 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.5% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-002 | 3.769 | 1.86 | 8 | 1.969 | 0.0027 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.513 | 2.586 | 0.0722 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 63.72008 | 63.72008 | 1 | 14.21 | 0.0021 | Significant Effect |
| Error | 62.78997 | 4.484998 | 14 | | | |
| Total | 126.51 | 68.20508 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 10.6 | 8.885 | 0.0059 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9193 | 0.8408 | 0.1644 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-002 | 8 | 0.8679 | 0.5334 | 1.202 | 0 | 2.714 | 0.3109 | 0.8793 | 101.3% | 82.14% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-8813-8025 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 41.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-001 | 2.883 | 1.761 | 14 | 2.005 | 0.0060 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.337 | 2.586 | 0.1586 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 43.09499 | 43.09499 | 1 | 8.311 | 0.0120 | Significant Effect |
| Error | 72.59713 | 5.185509 | 14 | | | |
| Total | 115.6921 | 48.2805 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.77 | 8.885 | 0.1011 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9564 | 0.8408 | 0.5967 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-001 | 8 | 1.577 | 1.016 | 2.138 | 0 | 4.714 | 0.5213 | 1.475 | 93.52% | 67.55% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 07-8640-9555 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:04 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 41.4% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-012 | 2.396 | 1.761 | 14 | 2.012 | 0.0156 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.329 | 2.586 | 0.1637 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 29.96535 | 29.96535 | 1 | 5.741 | 0.0311 | Significant Effect |
| Error | 73.07771 | 5.219837 | 14 | | | |
| Total | 103.0431 | 35.18519 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.655 | 8.885 | 0.1088 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9653 | 0.8408 | 0.7582 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-012 | 8 | 2.122 | 1.552 | 2.692 | 0.4167 | 5.222 | 0.5295 | 1.498 | 70.57% | 56.33% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 01-2179-5567 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 41.3% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-010 | 2.118 | 1.761 | 14 | 2.006 | 0.0263 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.337 | 2.586 | 0.1588 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 23.27462 | 23.27462 | 1 | 4.488 | 0.0525 | Non-Significant Effect |
| Error | 72.61075 | 5.186482 | 14 | | | |
| Total | 95.88537 | 28.4611 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 3.767 | 8.885 | 0.1013 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9684 | 0.8408 | 0.8115 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-010 | 8 | 2.447 | 1.886 | 3.008 | 1 | 4.75 | 0.5216 | 1.475 | 60.29% | 49.64% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 04-8551-5433 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 6.11% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-009 | -0.2228 | 1.761 | 14 | 2.971 | 0.5865 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.8 | 2.586 | 0.9587 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 0.5646426 | 0.5646426 | 1 | 0.04962 | 0.8269 | Non-Significant Effect |
| Error | 159.3032 | 11.3788 | 14 | | | |
| Total | 159.8678 | 11.94344 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.776 | 8.885 | 0.4661 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9372 | 0.8408 | 0.3164 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-009 | 8 | 5.235 | 3.783 | 6.686 | 0.75 | 11.1 | 1.349 | 3.816 | 72.89% | -7.73% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 10-9955-5793 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 5.14% |

**Equal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-008 | 0.9189 | 1.761 | 14 | 2.498 | 0.1869 | Non-Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 1.876 | 2.586 | 0.7755 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 6.795501 | 6.795501 | 1 | 0.8444 | 0.3737 | Non-Significant Effect |
| Error | 112.6672 | 8.047658 | 14 | | | |
| Total | 119.4627 | 14.84316 | 15 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 1.038 | 8.885 | 0.9623 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.9643 | 0.8408 | 0.7398 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-008 | 8 | 3.556 | 2.487 | 4.625 | 0 | 6.429 | 0.9936 | 2.81 | 79.04% | 26.82% |

**Leptocheirus 28-d Survival, Growth and Reproduction Sediment Test** — **EnviroSystems, Inc.**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis ID:** | 20-7947-0030 | **Endpoint:** | Offspring/Surviving Female | **CETIS Version:** | CETISv1.8.0 |
| **Analyzed:** | 15 Nov-10 11:03 | **Analysis:** | Parametric-Two Sample | **Official Results:** | Yes |

| | | | | | |
|---|---|---|---|---|---|
| **Batch ID:** | 05-8536-2148 | **Test Type:** | Leptocheirus (28-d) | **Analyst:** | |
| **Start Date:** | 14 Oct-10 12:00 | **Protocol:** | EPA/600/R-01/020 (2001) | **Diluent:** | Not Applicable |
| **Ending Date:** | 11 Nov-10 12:00 | **Species:** | Leptocheirus plumulosus | **Brine:** | Not Applicable |
| **Duration:** | 28d 0h | **Source:** | ARO - Aquatic Research Organisms, NH | **Age:** | |

| Data Transform | Zeta | Alt Hyp | MC Trials | Test Result | PMSD |
|---|---|---|---|---|---|
| Untransformed | 0 | C > T | Not Run | Sample passes offspring/surviving female endpoint | 40.2% |

**Unequal Variance t Two-Sample Test**

| Sample Code | vs | Sample Code | Test Stat | Critical | DF | MSD | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|---|---|
| 19830-000 | | 19830-003 | 4.219 | 1.895 | 7 | 1.954 | 0.0020 | Significant Effect |

**Auxiliary Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|
| Extreme Value | | 2.504 | 2.548 | 0.0631 | No Outliers Detected |

**ANOVA Table**

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---|---|---|---|---|---|---|
| Between | 70.68385 | 70.68385 | 1 | 15.57 | 0.0017 | Significant Effect |
| Error | 59.02631 | 4.540485 | 13 | | | |
| Total | 129.7101 | 75.22433 | 14 | | | |

**Distributional Tests**

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|---|---|---|---|---|---|
| Variances | Variance Ratio F | 29.82 | 10.79 | 0.0006 | Unequal Variances |
| Distribution | Shapiro-Wilk W Normality | 0.8919 | 0.8328 | 0.0717 | Normal Distribution |

**Offspring/Surviving Female Summary**

| Sample Code | Count | Mean | 95% LCL | 95% UCL | Min | Max | Std Err | Std Dev | CV% | %Effect |
|---|---|---|---|---|---|---|---|---|---|---|
| 19830-000 | 8 | 4.859 | 3.77 | 5.948 | 0.5714 | 10 | 1.012 | 2.863 | 58.92% | 0.0% |
| 19830-003 | 7 | 0.5079 | 0.3085 | 0.7073 | 0 | 1.5 | 0.1981 | 0.5243 | 103.2% | 89.55% |