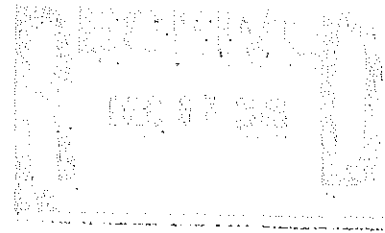


Caldwell Flea Reproduction failure November 2016



A TUC unit was indicated that is higher than the average monthly limit, and maximum daily limit of 2.58 and 7.68, respectively, for method 1002.0 reproduction test utilizing *C. dubia*.

All other tests performed (1000.0 Survival and Growth and 1002.0 Survival) had no effect.

The results of test method 1002.0, *C. dubia* reproduction, indicate an interrupted dose response. This puts the certainty of the test results, and whether they are the result of biological, or toxicological factors, into question.

Recommendation:

- A single additional test for EPA method 1002.0 with a QC 1002.0 ran alongside to determine if there was a biological anomaly that caused the failure, or if it was actual toxicity from the sample.
- Please check with your permit contact to ensure that this will suffice and that additional steps are not needed at this time.

Sincerely,

Spencer Curtis

WET Test Supervisor / Environmental Analyst
Analytical Laboratories