## COMPLETED PROJECT REPORT

**Project Title:** Zinc phosphide bait quality.

**Research Agency:** Genesis Laboratory

**Principal Investigator:** Harkrader

**Budget:** \$29,200.00

## **Background:**

October 2000:

- 1. Rodent Bait Zinc Phosphide Treated Grain (1.0% and 2.0%) Determination of certification of ingredient limits, method to verify certified limits, color, physical state, odor, and bulk density: report in preparation; will go through Genesis QA and then to sponsor.
- 2. Rodent Bait Zinc Phosphide Treated Grain (1.0%) Determination of color, physical state, storage stability and corrosion characteristics: both earlier samples submitted for this study did not meet criteria to start the storage stability portion of the study. The sample submitted on Sept. 28, 1999 averaged 0.8% zinc phosphide and the sample submitted on Feb 24, 2000 averaged 0.4% zinc phosphide. We are now awaiting another sample from the sponsor to analyze and begin the study with.
- 3. Rodent Bait Zinc Phosphide Treated Grain (2.0%) Determination of color, physical state, storage stability and corrosion characteristics: storage stability portion of study ends Dec 28, 2000. Will be preparing report upon conclusion of study.

## **Summary:**

May 2002

The final report has been received. The results included the following sections: certification of ingredient limit, analytical method to verify limits, color, physical state, odor, and bulk density.

Certification of ingredient limit (percent by weight): zinc phosphide 2.1%, rolled oats 96.1%, lecithin-mineral oil 1.3%, and lampblack dye 0.1%.

Analytical method to verify limits; zinc phosphide concentration percent by weight: sample 1 - 1.84%, sample 2 - 1.89%, sample 3 - 2.05%, sample 4 - 2.13%, sample 5 - 2.18%, and sample 6 - 2.32%.

Color: the bait was brown and the Munsell color characteristics were 2.5Y 3-5/2-4.

Physical state: the baits at 18.0 degrees C were a granular solid.

Odor: the bait had a slight grain odor.

Bulk density: 0.58 g/ml at 19.5 degrees C.

## **Last Updated:**

02/23/09