

MARCH 23, 1967

PERMA-GUARD CORPORATION  
1701 EAST ELWOOD STREET  
PHOENIX, ARIZONA

GENTLEMEN:

I WISH TO SUBMIT, AT THIS TIME, AN INTERIM REPORT ON AN EXPERIMENT WHICH I HAVE BEEN CONDUCTING IN THE SAN DIEGO, CALIFORNIA AREA, FEEDING FOSSIL SHELL FLOUR TO POULTRY.

THIS FEEDING TRIAL WAS CONDUCTED AT THE PROHOROFF POULTRY FARM AT SAN MARCOS, CALIFORNIA. THEY HAVE AN OPERATION OF APPROXIMATELY A MILLION AND A HALF BIRDS.

WE USED FOR THE EXPERIMENT 8000 WHITE LEGHORN CAGED LAYERS IN THEIR PULLET YEAR WHICH HAD BEEN IN PRODUCTION FOR ABOUT 5 MONTHS. WE USED ANOTHER 8000 OF THE SAME TYPE OF BIRDS FOR CONTROLS. ALL BIRDS WERE FED THE STANDARD 17% PROTEIN DIET. TO THE DIET OF THE EXPERIMENTAL GROUP WE ADDED 60 POUNDS OF FOSSIL SHELL FLOUR TO EVERY 1 1/2 TONS OF MIXED FEED.. THE TRIAL HAS RUN FOR 2 1/2 MONTHS.

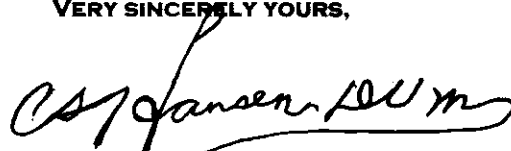
I HAVE PERSONALLY OBSERVED THE FOLLOWING RESULTS OF THIS EXPERIMENT TO DATE:

1. THERE APPEAR TO BE LESS FLIES AROUND THE HOUSES WHICH HAVE THE FOSSIL SHELL FLOUR ADDED TO THEIR DIETS ALTHOUGH FLIES ARE NOT CURRENTLY A MAJOR PROBLEM IN THIS AREA.
2. DROPPINGS ARE OF A DRIER CONSISTENCY AND NO WET SPOTS ARE VISIBLE IN THEM. THIS MAKES CLEANING OF THE HOUSES ON FOSSIL FLOUR MUCH EASIER THAN IT IS IN THE CONTROL HOUSES.
3. THERE HAVE BEEN APPROXIMATELY 75% LESS DEATHS IN THE HOUSES ON FOSSIL SHELL FLOUR. IN THE CONTROL HOUSES THERE HAVE BEEN 14 TO 16 DEATHS PER DAY. IN THE EXPERIMENTAL HOUSES THERE HAVE BEEN 2 TO 5 DEATHS PER DAY.
4. A 2 TO 4 CASE PER DAY INCREASE IN EGG PRODUCTION HAS BEEN OBSERVED IN THE EXPERIMENTAL GROUP. FROM OBSERVATIONS MADE DURING THE COURSE OF THIS FEEDING TRIAL, I WOULD SAY THAT THERE APPEARS TO BE A PLACE IN THE DIETS OF POULTRY FOR FOSSIL SHELL FLOUR.

WE ARE CURRENTLY RUNNING ANOTHER EXPERIMENT UNDER BETTER CONTROL CONDITIONS TO FURTHER EVALUATE THIS PRODUCT. IN THIS SECOND FEEDING TRIAL WE WILL STUDY THE POSSIBLE EFFECTS OF THE PRODUCT ON INTERNAL PARASITE CONTROL AND ALSO ITS EFFECT ON FEED CONVERSION. WE ARE FAIRLY CERTAIN OF OBTAINING POSITIVE RESULTS IN THESE AREAS.

THANK YOU FOR YOUR COOPERATION.

VERY SINCERELY YOURS,



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