

STUDY REPORT ON A CLINICAL FIELD TRIAL TO DETERMINE:

**Efficacy of Chloramine-T to Control Mortality
caused by Bacterial Gill Disease in Apache Trout Fry
(*Oncorhynchus apache*)**

Study Director

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ORIGINAL

Test Site: Williams Creek NFH, Whiteriver AZ 85941

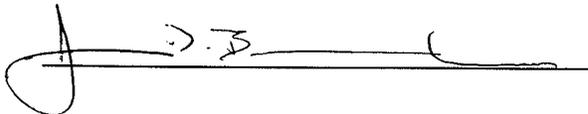
Study Number: #4000 -1 - 005

Study Start Date: May 25, 1999

Study End Date: June 12, 1999

Author: James D. Bowker

Authors Signature:

A handwritten signature in black ink, appearing to read 'J. D. Bowker', is written over a horizontal line. The signature is stylized and includes a large loop at the beginning.

ABSTRACT

A clinical field trial was conducted at the Alchesay - Williams Creek National Fish Hatchery (Whiteriver, Arizona) to evaluate the efficacy of chloramine-T to control mortality of Apache trout *Oncorhynchus apache* fry infected with bacterial gill disease (BGD). Six test units holding approximately 3,000 fish each were used during the study. Three of the test units were treated with 20 mg/L chloramine-T for 1 h using a standing-bath treatment method on three alternate days; the remaining three units served as non-treated controls. Before the study started, an acute case of BGD was confirmed in the test fish. The causative agent of BGD was identified as a long, slender, rod-shaped bacteria attached to the gill filaments. Bacterial cultures grown from gill tissue confirmed the presence of *Flavobacterium aquatile*. Percent mean cumulative mortality at the end of the 19-d study was significantly lower ($p < 0.001$) in treated units (8.7%) than in non-treated units (97.9%). Results indicate that chloramine-T treatment was efficacious in controlling mortality caused by BGD in Apache trout fry.