

→ Scott Watson

**Date:** September 16, 1994

**To:** The File - P.C. Christensen or C.M. Christensen Co., Phelps

**From:** Jim Kreitlow *JK*

**Subject:** Phone Conversation with P.C. Christensen

On September 1, 1994, at 1:45 p.m., I contacted Mr. P.C. Christensen of Phelps to seek permission to gain access to the C.M. Christensen property on September 2 to collect minnows from the minnow traps placed in the stream on August 23. Mr. Christensen had no objection and granted permission to enter the C.M. Christensen property and conduct our work.

JK:da

cc: M. Owens, Rhinelander  
J. Blankenheim, Rhinelander  
R. Falstad, Wausau  
G. Kulibert, Rhinelander  
L. Maltbey, Rhinelander  
L. Talbot, WR/2  
→ C. Antonuk, Rhinelander  
J. Amrhein, WR/2  
L. Liebenstein, WR/2

→ Scott Watson

**Date:** September 16, 1994

**To:** The File

**From:** Jim Kreitlow *JK*

**Subject:** Collection of Minnows in Military Creek & North Twin Lake  
(Caged Fish Study)

On September 2, 1994, Bob Young and I visited Military Creek and North Twin Lake to remove the first sample (10 minnows) of minnows from each minnow trap. This was the first sampling event, or the 10-day bioaccumulation time frame.

Starting with the background site #1, 10 fish were removed from each of the three cages, there was one dead fish in two of the three cages (2 dead, 88 alive).

Site #2, which is an impact site, located slightly downgradient from the old pole dipping area and footbridge, contained only two dead fatheads in one cage (2 dead, 88 alive).

At site #3, located downstream of Highway E, adjacent to the buildings of the old operation, contained only one dead fathead minnow in one cage (1 dead, 89 alive).

Site #4, the North Twin Lake site, contained six dead fatheads in one cage, 11 dead fatheads in the second cage and one dead fathead in the third cage (18 dead, 72 alive). It is suspected that these fish may be stressed as a result of low dissolved oxygen, because these cages were placed in approximately 15-20 feet of water. I moved the cages closer to the shore in about 8-9 feet of water to alleviate this problem. A D.O./temperature profile will be conducted on September 22.

In summary, all the minnows looked healthy and in good condition, with the exception of above-normal mortality in North Twin Lake fish cages. It is not known if this is dissolved oxygen or contaminant related. I moved the traps closer to shore in North Twin Lake to try to alleviate the problem if it is dissolved oxygen related. We will collect minnows again and pull the traps September 22, 1994 (30 day bioaccumulation time frame). The minnows collected were wrapped individually in lots of 10 with aluminum foil and labelled and frozen and placed in the North Central District freezer.

JK:da

cc: J. Amrhein, WR/2  
L. Liebenstein, WR/2  
L. Maltbey, Rhinelander  
C. Antonuk, Rhinelander  
M. Stokstad/D. Urso, Rhinelander

L. Talbot, WR/2  
M. Owens, Rhinelander  
G. Kulibert, Rhinelander  
R. Falstad, Wausau