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M E M O R A N D U M
November 4, 1985

To: Mike Morhous, SWRO
From: Joe Joy
Subject: Chlorine in Jewel Creek at Battle Ground

On October 22, 1985, Pat Crawford and I were conducting a reconnaissance survey of the Weaver (Woodin) Creek drainage. At 2:30 p.m., we arrived at Jewel Creek (a major tributary of Woodin Creek within the city of Battle Ground) to collect some water quality samples and measure flow (Figure 1). While collecting samples we noticed the odor of chlorine. We did not have a chlorine test kit with us, but we collected additional water for analysis in Olympia. We were unable to locate and sample Jewel Creek above its culverted section within Battle Ground.

A chlorine test conducted in Olympia at 5:30 p.m. gave the following results: 0.3 mg/L free chlorine, 0.6 mg/L total residual chlorine. Results from the field and laboratory analysis of the Jewel Creek sample are listed in Table 1.

Table 1. Jewel Creek samples at Nowak Lane

Flow (cfs)	0.25
pH (S.U.)	6.7
Conductivity (umhos/cm)	157
D.O. (mg/L)	8.95
NH ₃ -N (mg/L)	Not yet available
NO ₃ -N (mg/L)	" " "
NO ₂ -N (mg/L)	" " "
Fecal Coliform (org/100 mL)	<1

Pat Crawford revisited the site on October 23 at 5:30 p.m. No chlorine was detected.

Possible sources of chlorine washwater would be the Andersen Dairy processing plant, and the junior high and grade schools. All three are located along the culverted course of Jewel Creek and may have connections via storm sewers.

JJ:cp

Attachment

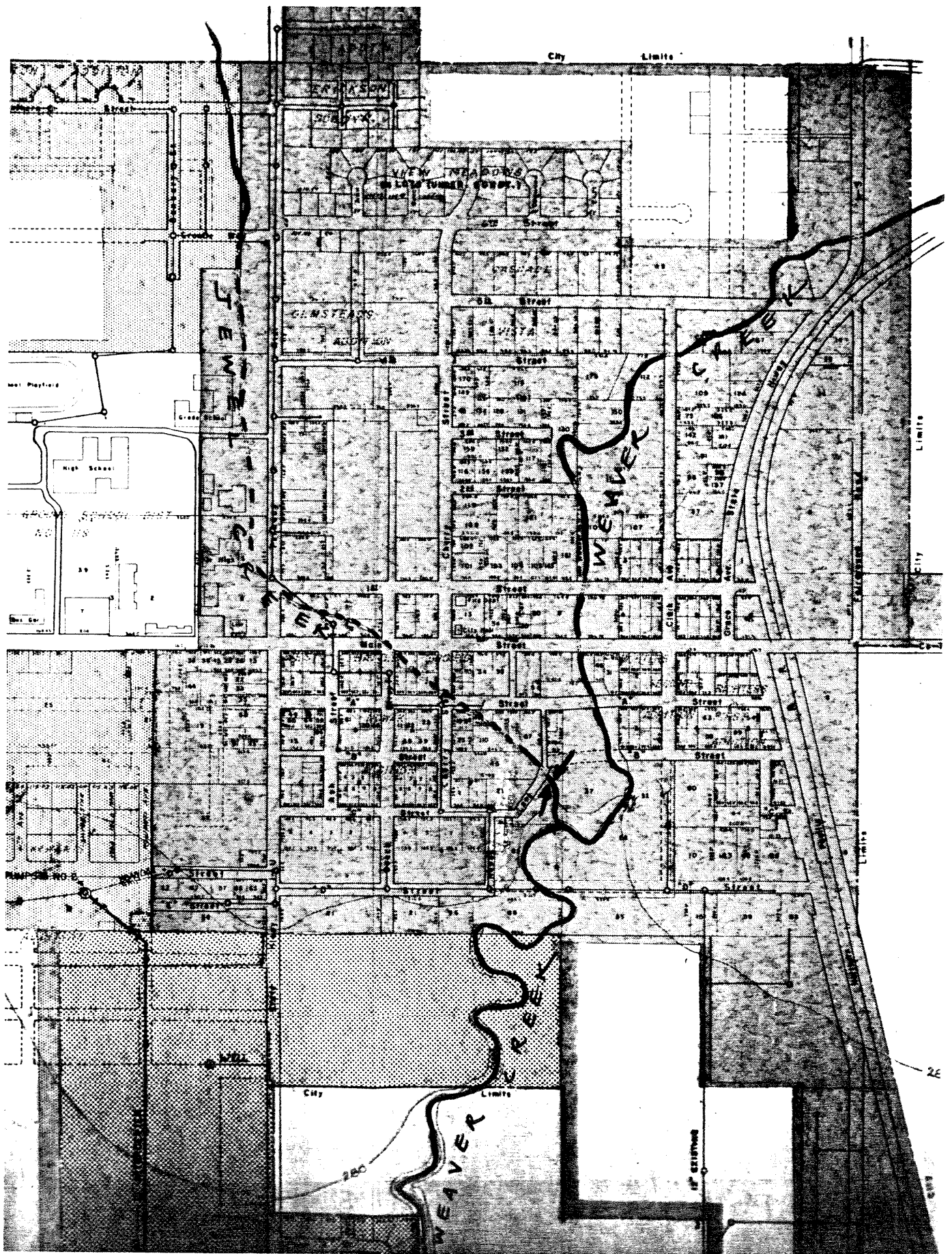


Figure 1. Jewel Creek sampling station in Battle Ground, October 22-23, 1985.