

DEPARTMENT OF FOOD AND AGRICULTURE



1220 N Street
Sacramento, CA 95814

November 15, 1985

Ray Perkins
Agricultural Commissioner
Yolo County Department of Agriculture
70 Cottonwood Street
Woodland, California 95695

Dear Ray:

Enclosed is a brief report of the Yolo County well water sampling that our program performed in June, 1985.

I would once again like to thank you and your staff for your assistance in conducting this well water survey.

If you have any additional questions about the results, please feel free to call me.

Sincerely,

A handwritten signature in cursive script that reads "Roger Sava".

Roger Sava
Environmental Hazards Specialist
Environmental Monitoring and Pest
Management, Room A-149
(916) 324-8916

Enclosure

cc: R. Devol
L. Johnston
Yolo County Dept of Health
Department of Health Services

SURVEY OF YOLO COUNTY MIGRANT WORKER AND RURAL
SCHOOL WATER WELLS FOR THE PRESENCE OF
AGRICULTURAL CHEMICALS

At the request of the Yolo County Agricultural Commissioner, Ray Perkins, personnel from the California Department of Food and Agriculture's (CDFA), Environmental Hazards Assessment Program (EHAP) performed a survey to determine the extent of any agricultural chemical contamination in well water at migrant worker camps and rural schools in Yolo County. Samples were to be analyzed for DBCP, EDB, disyston and screened for organophosphates, chlorinated hydrocarbons, and carbamates. Samples from 27 wells were collected July 12, 13, and 14, 1985.

SAMPLING METHODOLOGY

Each well was located and a signed permission slip was obtained from the well owner by Yolo County agricultural staff before sampling was begun. Prior to obtaining a sample, the well was run for a minimum of 10 minutes to provide a fresh recharge of water for the sample. Wherever possible, the water sample was obtained from a Shrader valve or other sampling port located between the well and the storage tank. If no sampling port was available, the sample was obtained from the faucet closest to the storage tank. Teflon tubing (1/4" O.D.) was used to transport water from the sampling ports to the bottom of sample bottles to avoid aerating the water as it filled the bottle. At each well, we filled six 1-quart amber glass bottles to the brim. Samples were sealed with foil lining and screw caps and stored on wet ice (4 C) while in the field and during transportation to the laboratory. Each sample was accompanied by a chain of custody form which was signed by each person handling the sample from bottle preparation until final analysis. Analyses were performed by the Chemistry Laboratory Services Branch of CDFA.

RESULTS

Upon completion of the analyses of well water samples, one well was found to contain detectable levels of EDB and alachlor. The presence of these compounds were confirmed by additional sampling. All results were negative (with the exception of alachlor) for screens for chlorinated hydrocarbons (MDL 0.05 ppb), carbamates (MDL 5 ppb), and organophosphates (MDL 0.1 ppb). Results were also negative for disyston (MDL 0.2 ppb) and DBCP (MDL 0.1 ppb). Listed below are sample dates, and concentrations of EDB and alachlor present in samples from well #12 (Table 1). The approximate location of the wells sampled in Yolo County are illustrated in Figure 1.

Table 1. Analysis of water samples from well #12

<u>Chemical Present</u>	<u>Date Sampled</u>	<u>Concentration (ppb)</u>	<u>Minimum Detec- tion Level(ppb)</u>
EDB	6/14/85	0.20	0.05
EDB	6/24/85	0.28, 0.29	0.05
EDB	9/25/85	0.20	0.05
Alachlor	6/14/85	3.00,0.5	0.1
Alachlor	9/25/85	1.50	0.1

FIGURE 1. WELL SAMPLE SITE DISTRIBUTION IN YOLO COUNTY

