Data shows wells may draw river water

By DAN KENNEDY

BOSTON — Data compiled by the U.S. Geological Service shows two contaminated Woburn wells may draw water directly from the Aberjona River, a defense lawyer in the Woburn leukemia trial asserted Tuesday.

Attorney Jerome Facher, representing Beatrice Foods Co., said the USGS measured the water level of the river during a month-long pumping test of municipal wells G and H in December 1985.

The river dropped two inches, from which the USGS inferred that the contaminated wells, which had been closed since 1979, draw water from the river at the rate of some 600 gallons per minute, Facher said.

But Dr. George Pinder, a hydrogeologist from Princeton University who was hired by the plaintiffs to study groundwater flow, told Facher the USGS data was correct but the inference was wrong.

During his second day under cross examination in U.S. District Court, Pinder said he had studied the fact that the river was losing 600 gallons per minute ever since the pump test was conducted, but only recently arrived at an explanation.

The drop in the level of the river, he said, was tied to the fact that some water normally flows from the underground acquifer into the river.

When wells G and H were turned on, the underground water pressure changed — and much less groundwater flowed into the river.

Rather than losing 600 gallons of water per minute. Pinder said, the river was simply being replenished at a rate that was 500 gallons per minute lower than when the wells are not in

Lawyers for the co-defendants in the trial. Beatrice Foods and W.R. Grace & Co., have attempted to argue that the Aberjona River, which has a history of industrial pollution going back to the early 1900s, was largely responsible for the contamination of the wells.

But Pinder said the river bottom consists of a layer of peat with low permeability, and that, once the wells were turned on, it would take 10 to 20 years before any river water would enter the wells.

The chemical solvents cited in the lawsuit evaporate quickly in open water, he added, saying the contamination level of the river would have to be extremely high if it were to pollute surrounding groundwater.

Facher disparaged Pinder's explanation, however, dismissing it as "cerebration" not based on data. He charged Pinder with developing an explanation for the jury that would not harm the plaintiffs 'case.

The trial involves a claim by eight East Woburn families that Beatrice and Grace allowed chemicals dumped on company property to contaminate wells G and H, which were closed in 1979 after 15 years of use.

The properties are the Riley Leather Co. tannery, 228 Salem St. (which deatrice owned between 1978 and 1983 and still retains legal liability), and Grace's Cryovac manufacturing plant, 369 Washington St.

At issue in the Beatrice portion of the case is a 15-acre site, formerly owned by the tannery and now owned by former tannery owner John J. Riley Jr., that is northeast of the main tannery grounds

tannery grounds.

The plaintiffs allege the site was used as a chemical dumping ground.

The Aberjona River flows from north to south, with the 15 acres on the west side of the river and wells G and H on the east side.

According to Pinder's testimony, groundwater under the 15 acres normally flows southeast into the river. But when wells G and H are pumping, the groundwater flows east and northeast under the river and into the wells, some 600 feet away, Pinder said.

Facher challenged Pinder's model Tuesday by noting that there are two private wells which service the tannery. One, a well with a capacity of 700 gallons per minute, is located on

the south edge of the 15 acres. The other, with a capacity of 400 gallons per minute, is on the main tannery grounds.

Facher asked Pinder whether underground contaminants would have flowed into the two Riley wells, rather than into wells G and H, if they had been pumping at the rate of 1,000 gallons per minute.

Pinder replied that some contaminants would have indeed flowed into the Riley wells if they were pumping at full capacity over a period of years. But he said Riley told him the wells pumped, on average, at the rate of 200 to 300 gallons per minute — and that he had figured that into his calculations.

Following Tuesday's court proceedings, Riley, who was in attendance, told the Daily Times Chronicle that he could not comment on the rate at which his wells pumped.