Sites of USGS Ground-Water-Quality Sampling

The USGS collected water samples from 68 wells in Oakland County in 1997 and 1998 (fig 7). Thirty of these wells were sampled as part of ongoing USGS activities. The results of these analyses are presented in Blumer and others (1998).

Thirty-eight wells were sampled specifically for this project between June and December 1998. These wells were selected for several reasons. All selected wells had a previous water quality analysis in the Michigan Department of Environmental Quality (MDEQ) database. The water from approximately half of these wells had exceeded at least one U.S. Environmental Protection Agency (USEPA) Maximum Contaminant Level (MCL) or Secondary MCL (SMCL) on at least one occasion. Additional wells with previous water chemistry information and lower concentrations of the chemical constituents of concern were selected in the vicinity of the wells with exceedances of the regulatory contaminant levels.

All but six of the wells selected for sampling were privately owned domestic water wells supplying a single-family dwelling. Two of the selected wells supplied water to institutions, one to a restaurant, one to a car wash, one to a community water supply, and one to a government building. Well depths, obtained from well construction logs when available, are included in appendix table 1C.

Two additional sets of samples were collected in December 1998. Each set included samples from five wells, which were selected on the basis of results of previous USGS and MDEQ water-quality analyses. These samples were collected to evaluate possible short- and long-term variation in water quality.

Sampling equipment in use outside a community water supply well in Oakland County, Michigan.

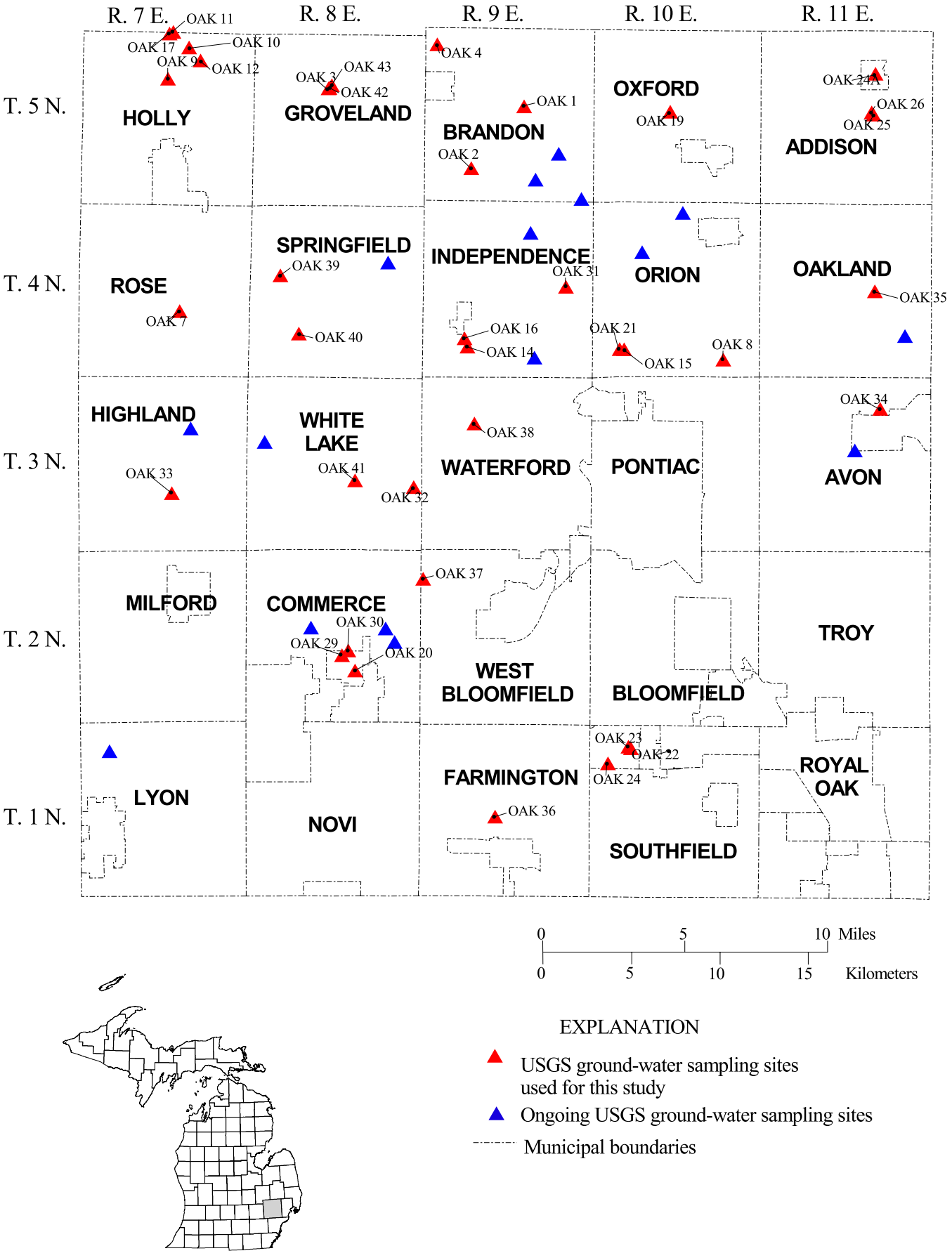

Figure 7. Sites of U.S. Geological Survey ground-water-quality sampling in Oakland County, Michigan.