## Clay Rural Water System Wakonda Water Treatment Plant Treatment Schematic



The Wakonda water plant utilizes a lime-softening process and has a capacity of 1.2 million gallons per day. Water is pumped from two wells located near the plant. Water is first aerated to remove tastes and odors and then treated in a solids contact unit with lime and soda ash to remove minerals and soften. Lime and soda ash settle out of the water with the minerals and form a sludge that is discharged to three drying lagoons. Carbon dioxide is then added to adjust pH. The water is filtered through sand filters to remove any lime and soda ash carryover. Fluoride and chlorine are added and the water is then pumped into the distribution system by five high-service pumps.

## Clay Rural Water System Wynstone Water Treatment Plant Treatment Schematic



The Wynstone plant utilizes a state-of-the-art reverse osmosis treatment system with a capacity of 360,000 gallons per day. Water is pumped from two wells adjacent to the plant. Water is split as it enters the plant with 20% going to two iron and manganese removal filters and the remainder to the reverse osmosis unit where iron, manganese and hardness are removed. The two streams then combine and run through an aerator to remove odors. Fluoride and chlorine are added as the water flows to an underground 125,000 gallon clearwell. Two high service pumps pump the water to a 250,000-gallon elevated tank. Water then flows by gravity to the distribution system.