



River Road Collector Wells

**PROJECT PROFILE
CONSTRUCTION**

CLIENT
O&G Industries/
Kleen Energy Systems

COLLECTOR WELL YIELD ANALYSIS, DESIGN AND CONSTRUCTION

Middletown, CT

SITUATION:

O&G Industries, as the prime contractor for the construction of the Kleen Energy Systems' 620 megawatt combined cycle power plant, was responsible for development of a new water supply to support the plant. Their consulting engineer identified sites for two collector wells with potential yields of 10 million gallons per day each. Collector well technology was selected to maximize the size of the water supply while minimizing environmental impacts to the Connecticut River during construction and ongoing operation. The team also determined that the best geologic materials for collector well construction were directly under the river bed and not along the shore.

SOLUTION:

Ranney Collector Well hydrogeologists collected additional geologic data on the shore conditions and the geologic deposits under the Connecticut Riverbed. That data indicated that there were suitable geologic conditions for obtaining the desired yields from both wells, but that the laterals would need to be extended in length to reach the suitable geologic conditions. The data also indicated that the lateral well screens would need to be gravel packed to maximize their effectiveness.

Based upon the data collected and with input from the client's engineer, the two collector wells were constructed by Ranney construction crews as planned with gravel packed laterals in lengths of up to 270 feet. Both collector wells yielded water necessary for plant operation and optimized the potential yields from the site.

SERVICES EMPLOYED:

+ Ranney Collector Wells

