

BIOFUELS

Case Study

WaterSim™

Apex team assists a Midwest biofuel plant overcome their infrastructure limitations and achieve water reuse and sustainability goals, creating a savings of well over 30%.



CHALLENGE

The plant was facing excessive water recycle and retreatment as a zero liquid discharge plan. This is a common extreme water stress in biofuel plants that can lead to pinch points in their processes

SOLUTION

Together with the plant's local team, Apex experts gained a deeper understanding of waterflows and processes, then suggesting using Apex's WaterSim™ program to improved water quality to process that would enable less downtime and higher yield in fermentation and distillation.

RESULTS

- ➤ Improved tower cycles from 8 to 13, saving energy and extending equipment longevity
- ➤ Decrease in sulfates while improving corrosion rates in the cooling system
- ➤ Reduced chemical discharge, creating a savings of well over 30%



Reduced Costs



Saved Water



Maximized ROI



Enhanced Compliance & Sustainability