

## Industrial

**Date Completed:**

2016

**Construction Cost:**

\$7 Million

**Client or Owner's Rep:**

Mr. Jared Fisher, PE  
Project Engineering Supervisor

**Highlights:**

- ✓ **Laboratory Scale Studies**
- ✓ **Process Selection, PFDs and P&IDs**
- ✓ **FEED and Detailed Engineering**
- ✓ **OSHA Required Standard Operating Procedures**
- ✓ **Start-Up Support Services**

**Photo:** FRP Clarifiers

## Recycle Water Treatment (RWT) Plant UOP Honeywell | Shreveport, LA

**Project Description** | The project included improvements to existing wastewater plant in support of a \$350 million Catalyst Growth Program (CGP) project. The RWT plant takes in wastewater from various patented catalyst processing units in the site, and evaporates and collects as much recyclable water as possible (distillate). The recyclable water is pumped back to the catalyst processing units. The bottoms stream is discharged as concentrated waste brine into deepwells. Solids are collected, dewatered and sent for off-site disposal.

**Services Provided** | KGI was a sub-consultant to Ford, Bacon & Davis (FBD) during concept development, FEED and detailed design phases of the project. Honeywell hired KGI directly for other project phases. The project scope included improvements to clarification, evaporation, surge capacity, and SOL management processes.

The proposed improvements included: Surge Tanks, Improvements to Existing DAF, two 20 feet diameter FRP Clarifiers for solids separation, two SOL Storage Tanks for SOL management, Heat Exchanger Replacement/Upgrade to improve Evaporation efficiency, and other miscellaneous improvements.

KGI was responsible for conducting laboratory bench scale studies, preparation of front end engineering packages including preparation of Material Requisition Packages of major equipment. During detailed design, KGI assisted in review of P&IDs, HAZOP, hydraulic calculations, review of piping drawings and development of Standard Operating Procedures (SOPs). KGI also assisted UOP Honeywell in start-up of certain process units.

