

## ALKYLATION UNIT CLEANING

An American multinational oil & gas corporation turned to **RYDLYME** as a solution for removing scale deposits from one of their state-of-the-art, Midwestern production facilities. A unique deposit identified by the facility engineers as ferric oxide had deposited within cooling passages of an alkylation unit. Alkylation is a conversion process in petroleum refining to produce alkylates for high octane gasoline. The process is delicate and must be kept within optimum parameters in order to operate safely, efficiently and maximize production. The deposit prohibited adequate heat transfer, which resulted in elevated pressures up to 34psi.

**RYDLYME** had been successfully utilized to maintain plate and frame heat exchangers in other areas of the facility. After evaluating alternatives with facility engineers, technicians and procurement specialists, **RYDLYME** was again selected as their solution. The **RYDLYME** cleaning took place during a single shift of a scheduled shutdown. After rinsing the cooling passages, a borescope was utilized to visually inspect the internals. Observations were described as 'Nice and shiny'. Upon startup and the unit achieving full operation, the pressure was recorded at just 4psi ( $\Delta P$  - 30psi)! The facility engineers now understand how safe and easy **RYDLYME** is to use and plan to clean the unit every other year moving forward. **RYDLYME** has been a solution for water scale and mineral deposits at all Big Oil companies for over 75 years.



### CHALLENGE

High-pressures caused by stubborn deposit accumulation in alkylation unit cooling passages.

### SOLUTION

Circulation of **RYDLYME** for less than 8 hours.

### RESULTS

A full 30psi drop in operating pressure, revised preventative maintenance program.