

# Optimizing Process Wash Water BTEX Removal at a Gulf Coast Oil & Gas Facility

## BACKGROUND

A natural gas liquids (NGL) fractionation facility in the Gulf Coast must clear out their filter pots, pre-filters, and coalescers of benzene, toluene, ethylbenzene, and xylene (BTEX) and hydrogen sulfide (H<sub>2</sub>S) prior to discharging their process wash water to effluent.

They hired a company to remediate BTEX using frac tanks and bio-solvent. However, this process required lots of equipment, 250-gallon totes of treatment chemical, and significant downtime, and did not sufficiently eliminate BTEX to meet their regulatory requirements.

## SOLUTION

ChemTreat devised an alternative process to remove BTEX and H<sub>2</sub>S from the wash water via oxidation using our CL427 and CL454 treatment products. This combination resulted in the destruction of the harmful chemicals in the waste streams while utilizing only 5% as much chemical as the previous treatment supplier.

## RESULTS

- \$700,000 in estimated savings across nine frac units since transitioning to ChemTreat's program
- Under current conditions, eight rental frac tanks no longer necessary, and 250-gallon totes replaced with 5-gallon pails, reducing equipment footprint
- Average unit downtime reduced by three days
- ChemTreat program uses 5% of the chemical needed by previous treatment program
- Customer eliminated BTEX waste from process wash water to meet their environmental goals

