

TOPGUARD salt control additive reduced corrosion by 80 percent, eliminated crude overhead exchanger failures

CHALLENGES

- Recent unit reconfiguration made corrosive salt formation condition more severe
- A previously effective water wash was unable to prevent salt formation under new conditions
- Frequent (5-8 months) exchanger tube leaks requiring reduced unit charge rate at a time of favorable refining margins
- Needed to achieve the next scheduled unit shutdown in 18 months without any more leaks

SOLUTION

- [TOPGUARD™ 1130 salt control additive](#):
 - Lowered corrosion rate under acidic salts with stronger base amine product
 - Significantly reduced salt corrosion
- First application to control salt corrosion without eliminating salt formation

RESULTS

ZERO

tube leaks in 18 months until turnaround

>80%

estimated corrosion rate reduction

USD 1 million

recovered annual profitability



Salt corrosion and fouling after only eight months with traditional treatment program



Salt corrosion and fouling was reduced after 18 months with TOPGUARD 1130 salt control additive

"There is now a reliable chemical treatment option for salt formation that cannot be prevented."

– **Joel Lack**
Sr Engineer Downstream Chemicals