

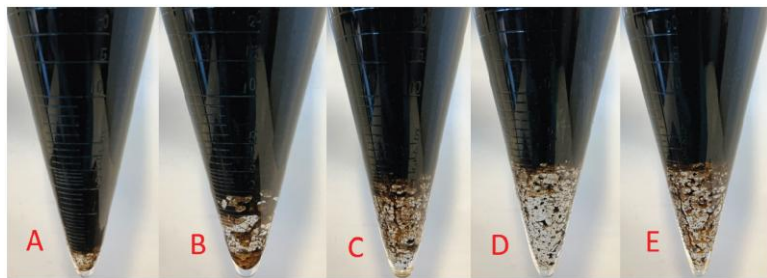
XERIC heavy oil demulsifier pretreatment enabled processing of 100% heavy Canadian Cold Lake crude

CHALLENGES

- Operator had no experience processing Heavy Canadian Cold Lake crude at 100% charge
- Other heavy crudes like Maya and Tempa Rossa were not available for processing
- Operator required 100% pure processing for effective removal of solvent deasphalting (SDA) residue and asphalt
- Single stage desalter would need to tolerate high pH wash water with no preflash
- Tank residence time for dewatering was restricted to three days

SOLUTION

- [XERIC™ heavy oil demulsifiers](#) were recommended to reduce feedstock costs while improving processing flexibility
 - Cold Lake samples were tested under the Electrostatic Desalting Dehydration Apparatus (EDDA) at Baker Hughes labs
 - XERIC 7016K pretreatment showed very good separation at 20 ppm
 - Additional 20 ppm of primary demulsifier further increased performance



A is blank. D is 20 ppm of XERIC 7016K plus 20 ppm of demulsifier after EDDA.



Customer confirmation of lab results (photo taken at customer's lab).

RESULTS

112m³

Water drained from the tank in three days per KPI

85%

Of solids and fines eliminated from crude

100%

Processing of Cold Lake crude for SDA and asphalt without water carryover or desalter issues

Reduced

Emulsion band size