ECO 22-4NG Versatile Demulsifier For Oil Recycling Mixtures

Problem

A used oil recycling facility in the Plains region receives waste oil from many high-water sources, such as railroads, coal mines and mechanic shops. Water content is often as high as 45%. A demulsifier with high versatility was needed to produce dry, saleable oil.

Solution

Several ECO demulsifiers were tested at 170-180°F, and ECO* 22-4NG gave the most consistent results. Over a concentration range of 3000-4000 ppm, depending on available settling time, oil was treated to < 1% BS&W.

Results

The customer now routinely treats 22,000 gallon batches at 3-4 gal/1000 gal by transfer-injection at ~180°F. After 1-2 days, once the oil has cooled to ~150°F, separated water is drained and the small rag layer (5-10% by volume) is run through a centrifuge, the clean oil is recovered for sale.

The customer is now evaluating the ability of ECO 22-4NG to perform at 140-150°F. Early signs are promising.