

## MX 996-1 Emulsion Breaker Improves Water Quality

Reduces amount of chemical required for water clarification

### BACKGROUND

New production was brought on at the Allegheny TLP, resulting in a significant decrease in fluid retention times in the separation vessels. The incumbent product was not able to effect phase separation quickly enough to maintain pipeline quality oil, discharge quality water, and efficient vessel operation without an increase in chemical injection rate.

### ISSUES

A change in production resulted in elevated BS&W and poor water quality after initial separation. Higher treatment rates for both the emulsion breaker and water clarifier were required to meet specifications.

### ANALYSIS

The Gulf Coast Region technical service group conducted a series of on-site bottle tests using both the commercial Emulsion Breaker kit and numerous experimental formulations and demulsifier bases. MX 996-1 was selected based on speed of phase separation, overall dehydration of crude oil, and water quality.

### RESOLUTION

MX 996-1 was plant successfully plant tested, reducing the demulsifier injection rate from 100ppm to 60ppm. This product also provided improved overboard water quality.

### DELIVERED VALUE

Not only did MX 996-1 lower the emulsion breaker injection rate, but by providing improved water quality downstream of the separation vessels, it also resulted in less demand for water clarifier usage.

Multi-Chem warrants to purchaser, but no third parties or others, the specifications for the product shall fall within a generally recognized range for typical physical properties established by Multi-Chem when the product departs Multi-Chem's point of origin and that any services shall only be performed in accordance with applicable written work documents. Purchaser agrees that Multi-Chem will give purchaser the benefit of Multi-Chem's professional judgment in making interpretations of data, but does not guarantee the accuracy or correctness of such interpretations. Multi-Chem's recommendations contained herein are advisory only and without representations as to the results. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY MULTI-CHEM SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THE WARRANTY CONTAINED HEREIN. EXCEPT AS OTHERWISE SET FORTH HEREIN, THE PRODUCTS AND SERVICES ARE "AS IS" AND MULTI-CHEM MAKES NO OTHER WARRANTY OR GUARANTEE OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. PURCHASER AGREES THAT MULTI-CHEM SHALL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES OR LOSSES FROM ANY CAUSE WHATSOEVER INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR GROSS NEGLIGENCE.

#### Global Technology Center

World Houston International Business Center  
15865 International Plaza Drive, Suite 200  
Houston, Texas 77032 USA

(800) 805 9178  
(325) 223 6200  
(325) 942 7500 FAX

[www.multichem.com](http://www.multichem.com)

