

## PROJECT OVERVIEW

# MASSIVE COKE DRUMS DELIVERED



REDONDO BEACH

PORT OF  
LOS ANGELES

## THE PROJECT:

Safely transported six huge coke drums from the Port of Los Angeles on an approximately 28-mile voyage to King Harbor in Redondo Beach for installation at Chevron's El Segundo Refinery. Foss collaborated with heavy-lift company Mammoet USA, utilizing a detailed ballasting plan to keep the barge level during operations, which required the placement of ramps to load and unload. Self-propelled modular transporters (SPMTs) moved the cylinders from the barge moored at a levee in a yacht marina to a staging site near the final destination of the drums at the refinery. [View project highlights online.](#)

### SERVICES PROVIDED:

- Oil Field Services
- Domestic Project Cargo Transportation
- Regional Towing

### HIGHLIGHTS:

- On three successive Mondays in February and March 2013, the drums were carried two at a time on the barge *ZB 240* towed by the *Edith Foss* and assisted by the *Pacific Queen*.
- Each coke drum is 100' long x 28' in diameter and weighs 500,000 pounds.
- The new drums replace existing drums built in 1968. They will increase the reliability of the coke drum operations and take advantage of more than 40 years of industry advances in coke drum design.
- Foss collaborated with Chevron, Mammoet USA and Fluor, a global engineering construction company, to develop a complex and comprehensive transport safety matrix for the project.
- Attention to detail and commitment to the continual improvement process were key to the success of these operations. Innovation developed from the first landing was incorporated into the second and third landings, such as doubling the wooden crane mats, securing them with an anchoring system and lashing them together to improve the rock piling fendering system.