

A million dollar contract by Keys Energy Services required Underwater Engineering Services to seal minor cracks and replace over 100 corroded power poles found in the waters of Key West.



A crane lifts and extends a Thom-Katt TK 40 trailer-mounted concrete pump over water, positioning it a mere six inches from the barge's edge to maximize space. The pump was supplied by Quality Concrete Pumping of Coral Springs, FL for continuous use over a ten week period.



The barge used every inch of space to hold a variety of equipment – a trailer pump, batch plant, air compressor, welder, excavator – along with several gallons of fresh water and numerous thousand pound bags of cement, sand and other ingredients needed to produce concrete on board.



As water depths would fluctuate from six inches to 20 feet, each pole and each day had to be handled in a different manner.



Retarders were added to make the concrete a slower setting mix and plasticizers to help it flow.



Tremie pours were performed, employing a high strength 7,000-psi concrete and the efficiency of a Putzmeister trailer pump.



As it was difficult to return to land nightly because of changing water levels, the barge was fully loaded to maximum capacity with all equipment and critical provisions needed to remain working at bay.