



## Success with UCON™ Trident™ 32 AW Hydraulic Fluid

### Case History

Conversion of a Barge Dock Hydraulic Crane in Texas City to UCON Trident 32 AW Hydraulic Fluid.

### The Problem

The barge dock hydraulic crane used to load and off-load material for a company in Texas City was using an ISO 32 Viscosity Grade AW Mineral Oil. The crane was subject to hydraulic fluid leaks and spills which resulted in a petroleum oil sheen or slick forming on the surface of the water in the ship channel. That was a major environmental issue, which could result in fines by State and Federal regulatory agencies.

### The Solution

In August of 1995, the mineral oil based hydraulic fluid in a dockside hydraulic crane was replaced with UCON Trident 32 AW Hydraulic Fluid.

### The Results

The UCON Trident fluid has been used in the barge dock crane since August 1995 without any reported problems. After 6 years of service, the UCON Trident fluid had no indication of metal wear or unwanted residue and showed excellent performance in this service. No oil sheen has been observed in the water near or around the crane. The company has been very happy with the performance of this hydraulic fluid and plans to convert more equipment over to this environmentally friendly hydraulic fluid. In 1997, the rest of the barge dock hydraulic cranes and overhead hoist were converted to UCON Trident 32 AW Hydraulic Fluid at this Texas City Marine Terminal. In 1998, four Dockside cranes were converted to UCON Trident 32 AW Hydraulic Fluid at the company's Seadrift Terminal in Southeast Texas.

### Equipment

National Crane Corporation, 3-section boom crane with winch.  
One main hoist cylinder and one boom cylinder.  
Vickers rotary vane pump

### Product Description

UCON Trident AW Hydraulic Fluids are high performance hydraulic fluids designed for demanding industrial applications requiring environmental sensitivity, water solubility, fire resistance, and excellent anti-wear properties over wide temperature ranges. These polyalkylene glycol (PAG) based fluids which are available in three viscosity grades, are anhydrous (water-free) and are rated as anti-wear. UCON Trident Hydraulic Fluids do not breakdown to form sludge, and they do not hydrolyze in the presence of water. Furthermore, because of their high viscosity indices and low temperature characteristics, one UCON Trident viscosity grade fluid may replace two or three mineral oils. These hydraulic fluids are ideal for use in applications such as dockside/marine, forestry, amusement, and industrial operations.

### Product Stewardship

Dow encourages its customers and potential users of Dow Products to review their applications from the standpoint of human health and environmental aspects. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature, including Safety Data Sheets, should be consulted prior to the use of Dow products.

**For More  
Information**

If you are interested in more information about UCON Trident AW Hydraulic Fluid or any other UCON fluids and lubricants, please contact the Dow Customer Information Group at 1-800-447-4369 (U.S. and Canada) or 1-989-832-1560 (from other global region). Additional information can be found on the Dow website at [www.ucon.com](http://www.ucon.com)

**For more information:**  
North America: 1-800-447-4369  
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<http://www.dow.com/polyglycols>

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