WOOD RIVER REFINERY CORE PROJECT IS ON SCHEDULE:

The Coker and Refinery Expansion (CORE) project at the WRB Refining LLC – ConocoPhillips/Cenovus Wood River Refinery is progressing according to schedule. The refinery currently has a crude oil processing capacity of approximately 306,000 barrels per day (or 12,852,000 gallons per day). Following are three areas of refinery operations that will be improved when the CORE project is completed:

- Increase total crude oil refining capacity to 356,000 barrels per day, making the Wood River Refinery the 6th largest refinery in the US.
- Increase light product yield by 10% (diesel fuel, jet fuel and gasoline).
- Eliminate 40,000 barrels per day of low-value asphalt production.

A large, four-drum Coker Unit is the key process unit in the refinery CORE project. The new coker unit will process up to 55,000 barrels per day of heavy sour crude oil. The bulk of this heavy crude is expected to come from the oil sands of west Alberta, Canada, via the 1,870-mile Keystone pipeline which is now in operation. Refinery streams produced in the coking process will be used in blending high-value diesel fuel, jet fuel and gasoline. Coke is the main product of the coker unit and resembles finely pulverized coal. Coke is mainly sold for use at electrical power generation plants.

The two photographs below show different views during construction of the four-drum coker structure in the northeastern segment of the Wood River refinery. Since the coker unit is a massive structure, it is easily seen and identified inside the refinery when traveling along roads and highways adjacent to the plant. Each of the four coke drums is a very large and heavy vessel, approximately 131 feet tall, 33 feet in diameter and weighing approximately 1.1 million pounds (545 tons). Note the size of the man in the photograph on the left.

Four Coke Drums in Place on Base

Front of Coke Drums on Concrete Base

Below are a series of pictures that show how each coke drum was lifted and set into place on the concrete base. Figure 1 shows the initial lift of a coke drum to allow positioning over the base. Figure 2 shows the coke drum aligned with the area of the base where it will be attached. Figure 3 shows the coke drum being lowered into place on the base. Figure 4 shows the coke drum almost set in final position on the concrete base. This same lifting operation had to be done for each of the four coke drums and several days were needed to complete the drum lifts and final placements.

Figure 1. Initial lift of coke drum

Figure 2. Coke drum lined up with base

Figure 3. Coke drum lowered onto base

Figure 4. Coke drum almost set on base

Completion of the CORE project in late 2011 or early 2012 will position the Wood River Refinery to be a strong competitor in supplying light petroleum products in the US mid-continent area for the foreseeable future. The CORE project will transform the Wood River Refinery into a more modern, efficient operation, producing a high proportion of clean transportation fuels in the heart of one of North America's largest consumer markets.

Jim Maynard – CAP Member – December 2010