CASE STUDIES

2 - CONOCOPHILLIPS – HUMBER REFINERY

The Refinery is one of the most complex within the UK and is built across 480 acres, employing over 750 people. Every day the Refinery processes some 230,000 barrels of crude oil and other feedstocks as well as Gasoline and Diesel for transportation. The Refinery produces propylene, benzene and other feedstocks used in the manufacture of products such as detergents, toiletries and plastics of all types.

Carver worked with ConocoPhillips Humber Refinery to implement a “Machine Health Management” program to a reciprocating compressor to maximize Availability and Reliability of this unit. The MHM concept is a proactive, integrated process that engages the entire lifecycle of identified critical equipment/ components. The Targeted equipment or asset exists to deliver predetermined production and /or safety system goals within specified process and equipment design operating criteria. The MHM strategy serves as a dynamic system for Identifying and evaluating opportunities to prioritize, optimize and manage resources while objectively measuring relevant KPI’s.

Total loss due to compressor unavailability prior to MHM implementation was equivalent to $2,626,714.00 USD! Previous strategy was prior to implementation was costing the customer $895,980.00 and the benefits were only equivalent to $216,767.00. whereas the MHM strategy was costing them ONLY $746,650.00 and the benefits were equivalent to approximately $2,389,280.00!