



Condition Monitoring (Oil Analysis) - Oil and Gas



Situation

The second project for the same company was instigated to optimise the maintenance and running costs of the company's wide range of diesel engines. At the site there were several hundred engines of various sizes doing different jobs. Some operated on a more or less continuous basis whereas other acted as standby units.

Task

The project started with a review of the usage of the diesel engines both in terms of the actual function and the usage profile. Not surprisingly some of the engine's usage pattern had changed over time, but the maintenance procedures had remained the same. Based on the new up to date information the correct type of maintenance activity was selected, encompassing inspections, condition based maintenance etc.

Activities

As part of the change in maintenance strategy and policy, a program of oil sample collection and analysis was implemented. The oil samples taken in the initial survey also identified some impending failures and help to establish credibility for the project. This early success also enabled other changes (to the preventive maintenance routines) to be more readily accepted.

Result

Several imminent failures were prevented and other potential problems in various items of equipment were identified.

A cost effective preventive and condition based maintenance program was introduced taking into account the work the engine was doing, the criticality of the function, the environment etc.

The new program improved the overall reliability of the equipment and reduced the cost of repairs and associated downtime.