

## OIL CONDITION MONITORING OF MINING MACHINERY

It is well known that "Oil in Machine is like 'Blood in Human Body'". Therefore Oil Condition monitoring of machinery is the measurement of various parameters related to the mechanical condition of the machinery (such as Viscosity of the oil at 40°C, presence of water/moisture in oil, contamination, wear debris, etc. etc.). The measurement of these parameters makes it possible to determine whether the machinery is in good or bad mechanical condition. If the mechanical condition is bad, then condition monitoring makes it possible to determine the cause of the problem, and then take the corrective action.

Condition monitoring is used in conjunction with *predictive maintenance*, i.e. maintenance of machinery based on an indication that a problem is about to occur. Hence, regular oil condition monitoring will lead to:

- \* Avoiding unexpected catastrophic breakdowns with expensive or dangerous consequences - Loss of Production.
- \* Reducing the number of overhauls on machines to a minimum, thereby reducing mechanical maintenance costs.
- \* Eliminating unnecessary interventions with the consequent risk of introducing faults on smoothly operating machines.

- \* Allowing spare parts to be ordered in time and thus eliminates costly inventories.
  
- \* Reducing the intervention time, thereby minimizing production loss. Because the fault to be repaired is known in advance, overhauls can be scheduled when most convenient.

We, at *MACHINERY HEALTH MANAGEMENT SERVICES, Bhubaneswar*, are fully equipped to test your oil, report test results accurately and within shortest time period. It has to be appreciated that in case the test reports are not received on time, mechanical damage can set in the machine and therefore, quick action and accurate reports with clear recommendations are a must for quick corrective action.