

# Oil Processing Available at AEDC

## Removal of particle and water contamination improves equipment reliability and saves \$\$\$

Unexpected equipment failures can be very costly, with oil contamination being a leading contributor. AEDC personnel utilize an on-site Oil Processing Facility designed to “super-clean” large quantities of oil in a short period of time. By ensuring the oil is kept clean and dry, AEDC has increased the reliability of the equipment while decreasing maintenance costs.

The Oil Processing Facility removes particle contamination down to 3-microns, which is about 1/25 the size of a human hair, meeting an ISO 4406 code of 17/15/12. Minimization of these particles ultimately extends the life of the equipment.

This facility also removes water to levels below 200-parts per million (ppm). As water accounts for a major part of mechanical failures, removing water

ensures that its harmful effects are eliminated while retaining the protective properties of the oil's additive package. This is done by a special process known as vacuum dehydration, which manipulates the boiling point of water to less than 150°F.

AEDC is capable of processing either Mobil DTE Series or Chevron/Texaco Regal R&O oils up to 68-cSt in viscosity. Typically less than two weeks is required to clean up to 1,500 gallons of oil, with results validated by an on-site lab. AEDC's current processing capacity available to other sites is approximately 25,000 gallons per year.



Stationary oil purifiers at the Oil Processing Facility



Personnel monitor oil purification system for pressure across the filter



Oil is evaluated at an on-site chemical analysis lab.

## AEDC Oil Processing facts

- ✓ Remove water content to below 200 parts per million (ppm)
- ✓ Remove particles <3 microns (1 micron~1/25,000 of an inch)
- ✓ Can process two major types of industrial equipment oils
- ✓ Potential turnaround of less than two weeks for up to 1,500 gallons of oil
- ✓ On-site lab validation of results
- ✓ Up to 25,000 gallons of processing per year available to other sites