Oil analysis was originally developed for preventive maintenance for engines. Engine fleet managers could track wear over time and by watching wear metal counts, they could take an engine out of service before serious problems arose.

The same principles apply to hydraulic fluids and because hydraulic systems are more sensitive to foreign materials than engines, the reports have been expanded to give more detailed information.

Effective preventive maintenance programs use frequent oil analysis as a means of predicting problems. This allows for scheduled maintenance, repairs and unscheduled downtime.

When starting preventive maintenance programs it may take 8-10 samples to get meaningful baseline data after this period critical systems should be checked every 1-3 months. Less critical auxiliary systems can be checked every 3-4 months.

One study showed that “Breakdown Maintenance” (maintenance performed after noticeable deterioration in machine condition) costs an average of $17 to $18 per horsepower of machinery per year. It also showed that “Predictive” preventive maintenance costs only $7 to $9 per horsepower of machinery per year.

 Kits Include: Oil bottle, service form, mailing bottle and prepaid lab service report. Lab report will include: particle count, spectrometal analysis, viscosity classification, percent water content and TAN* (Total Acid Number).

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>TAN* OPTION</th>
<th>QUANTITY PRICING</th>
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<tr>
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COST/BENEFIT ANALYSIS EXAMPLE

YEAR ONE
Labor to take and review samples ....................... $500
Sample cost - 40 machines ................................ $3440
Training and start-up supplies .......................... + $1500
TOTAL START-UP COST ...................................... $5440
Reduced line downtime ..................................... $5350
Reduced oil consumption 20% through unnecessary changes ........................................... $800
Reduced labor cost from not changing oil .......... $300
Reduced overtime 35% for unplanned downtime .......... $1500
Reduced cost of component repair (20%) ............. + $1000
TOTAL START-UP COST ...................................... $8950

RETURN ON INVESTMENT = 164%
SIMPLE PAY BACK PERIOD = 7.3 MONTHS