



CAT 1N/1K Comparison with CAT 1P

HDEOCP

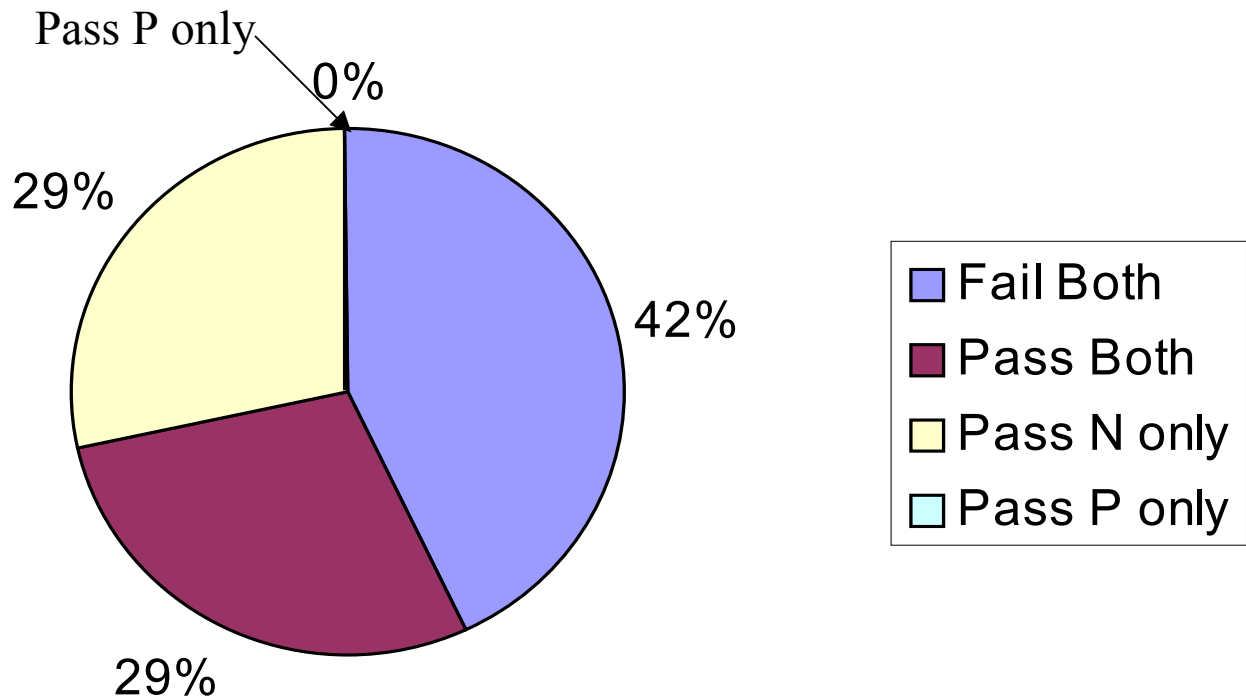
November 11, 2004

Correlation of Single Cylinder CAT Tests

- The number of direct comparisons of the CAT 1K to the CAT 1P is significantly higher than the CAT 1N to the CAT 1P.
- No significant positive correlation exists between the 1K/1N groove and land ratings and the corresponding 1P groove and land ratings.
- The CAT 1P is more sensitive than the 1K/1N to Oil Consumption failures.
- Overall passing results show the CAT 1P to be more severe than the 1K/1N

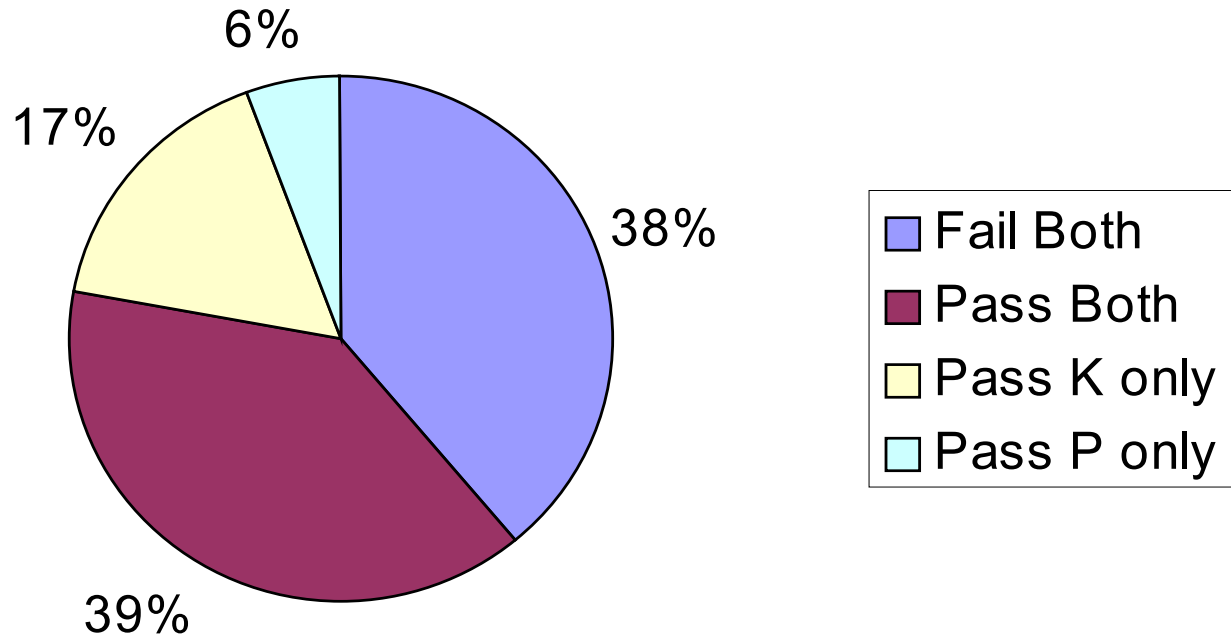
1N vs. 1P

CAT 1N and 1P Comparison



1K vs. 1P

CAT 1K and 1P Comparison



Summary

- Single test parameters from the CAT 1P do not correlate with the 1N or 1K.
- The CAT 1P can be used to screen oils for the 1N and 1K.