



# KEY #6 TO OIL ANALYSIS SUCCESS

Oil Color testing measures a lubricant's appearance using the ASTM D1500 scale (0.5 light to 8.0 dark) to provide a standardized indicator of oil condition.

## Color Analysis ASTM D1500

### What is Oil Color Testing?

Oil Color testing is a laboratory method used to evaluate the appearance of a lubricant and assign it a standardized color rating. Using the ASTM D1500 scale, oil color is measured on a range from 0.5 (very light) to 8.0 (very dark), providing a consistent and repeatable way to assess changes in oil condition.

### Why It Matters!

Lubricants naturally change color as they age. New oils typically appear light and bright, but as they operate in service, oxidation, thermal stress, and contamination cause them to darken.

While darkening alone does not always mean the oil has failed, significant color changes can indicate degradation, contamination, or additive depletion. Monitoring oil color helps identify shifts in lubricant condition early, supporting proactive maintenance decisions and protecting critical equipment.

Because visual observation is subjective, standardized testing ensures results are objective, comparable, and trendable over time.

### How It Works

Just as a referee assigns a score in a game, ASTM D1500 assigns a numerical value to oil color. In the laboratory, a sample is compared against standardized color references under controlled lighting conditions. The oil is then assigned a rating between 0.5 and 8.0.

Lower numbers indicate lighter oil, while higher numbers indicate darker oil. In this game, like golf, a lower score is generally better.

By trending ASTM D1500 results over time and comparing them to baseline values, maintenance teams can detect abnormal changes that may signal oxidation, overheating, or contamination. This insight helps ensure equipment remains reliable, efficient, and ready to perform.



Keep it light. Keep it bright.

