

## • Customer Information

Vehicle: 2020 Dodge Ram 1500

Odometer: 86,498 miles

VIN: 2C4RDGEG4KR7269277

Report Date: October 30, 2025

Customer Email: customer@sample.com

## • Test Result **BELOW AVERAGE**

Submitted Vial Sample:



### Observed Color: Yellow-Green

The sample shows a yellow-green tint, which indicates elevated internal contamination and higher-than-typical combustion-gas bypass for this mileage.



Your submitted test sample

## • Estimated Wear Index & Benchmark Comparison

**Estimated Wear Index: 62 / 100 (Below Average)**



Based on the observed color and the vehicle mileage, the estimated wear index is **62/100**. This reflects more internal contamination compared to typical examples of the same model and mileage range.

### Benchmark Comparison:

A simple mileage-only benchmark (200,000 mile service-life baseline) suggests roughly **~57% remaining life** at 86,498 miles. Taking the observed sample color into account, a more cautious estimate of remaining engine life is approximately **~38% remaining**.

## • AI Analysis

For gasoline engines a conservative service-life benchmark is **200,000 miles**. At **86,498 miles** the mileage-only estimate leaves about **~57% expected life remaining**.

Your sample color is yellow-green and the result badge is **BELOW AVERAGE**. Below are common reasons a vehicle can show higher blow-by and why that is a concern:

- **Worn piston rings or cylinder wear:** as rings wear they let more combustion gases pass into the crankcase. This drives contamination and reduces compression.
- **Valve guide or seal wear:** worn guides can allow oil into combustion, increasing residue and contamination.
- **PCV or crankcase ventilation issues:** clogged or malfunctioning ventilation can concentrate gases and oil vapors.

**Why high blow-by is not good:** it increases oil contamination and dilution, speeds internal wear, reduces engine efficiency, and can lead to higher oil consumption and lower compression. These effects shorten useful engine life if left unchecked.

Taking the observed color into account, a more cautious remaining-life estimate for this engine is about **~38% remaining**. This value combines the mileage baseline with the observed contamination level.

## • Recommendations to Maintain Engine Health

- **Follow manufacturer service intervals.** Keep up with oil and filter changes using the recommended oil grade and interval.
- **Inspect ventilation components.** Check the crankcase ventilation system (PCV) for blockages or faults.
- **Monitor oil condition and level.** Look for unusual color, smell, or rapid consumption and address promptly.
- **Consider a compression/leak-down check.** If contamination persists, a mechanical inspection helps identify ring or cylinder wear.
- **Retest in 6–12 months.** A follow-up test will show if contamination is stable or increasing.

 **Recommended Retest: 6–12 months**

## • Disclaimer

### **Important Notice**

This report is provided for informational purposes only. The color-based test indicates general crankcase condition trends but **does not replace professional mechanical inspection**. Results can vary with sample method, oil type, driving style, and photo conditions. Life expectancy estimates are generalized and approximate. ExhaustIQ assumes no liability for decisions made based solely on this report.