

OIL ANALYSIS REPORT

Sample Rating Trend





Component Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

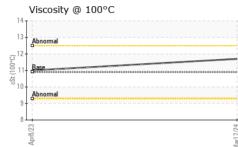
Fluid Condition

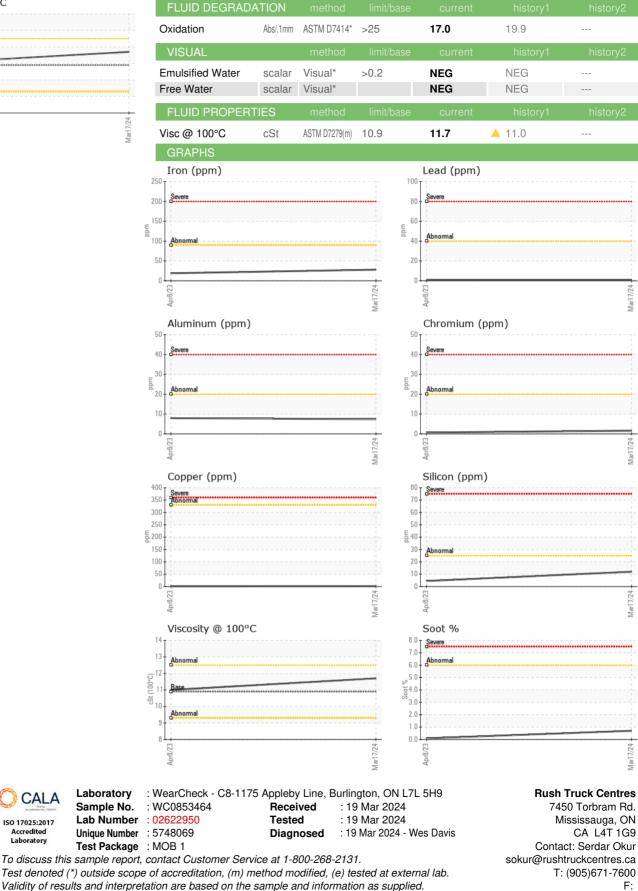
The condition of the oil is acceptable for the time in service.

| | | | Apr2023 | Mar2024 | | |
|---------------|--------|---------------|------------|-------------|--------------|----------|
| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0853464 | WC0796345 | |
| Sample Date | | Client Info | | 17 Mar 2024 | 08 Apr 2023 | |
| Machine Age | kms | Client Info | | 116556 | 29574 | |
| Oil Age | kms | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | Not Changd | Changed | |
| Sample Status | | | | NORMAL | ABNORMAL | |
| CONTAMINATION | | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >3.0 | <1.0 | A 3.1 | |
| Water | | WC Method | >0.2 | NEG | NEG | |
| Glycol | | WC Method | | NEG | NEG | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >90 | 28 | 19 | |
| Chromium | ppm | ASTM D5185(m) | >20 | 2 | <1 | |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | 0 | |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | <1 | |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185(m) | >20 | 7 | 8 | |
| Lead | ppm | ASTM D5185(m) | >40 | <1 | <1 | |
| Copper | ppm | ASTM D5185(m) | >330 | 1 | <1 | |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | <1 | |
| Antimony | ppm | ASTM D5185(m) | | 0 | <1 | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | 250 | 17 | 46 | |
| Barium | ppm | ASTM D5185(m) | 10 | 0 | 0 | |
| Molybdenum | ppm | ASTM D5185(m) | 100 | 3 | 6 | |
| Manganese | ppm | ASTM D5185(m) | | 0 | <1 | |
| Magnesium | ppm | ASTM D5185(m) | 450 | 758 | 715 | |
| Calcium | ppm | ASTM D5185(m) | 3000 | 1420 | 1368 | |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 736 | 731 | |
| Zinc | ppm | ASTM D5185(m) | 1350 | 803 | 759 | |
| Sulfur | ppm | ASTM D5185(m) | 4250 | 2702 | 2551 | |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >25 | 12 | 4 | |
| Sodium | ppm | ASTM D5185(m) | | 4 | 2 | |
| Potassium | ppm | ASTM D5185(m) | >20 | 12 | 16 | |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | ASTM D7844* | >6 | 0.7 | 0.1 | |
| | | | | | | |
| Nitration | Abs/cm | ASTM D7624* | >20 | 10.2 | 10.8 | |



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