

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id WB SUP-02 Component Diesel Engine Fluid NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

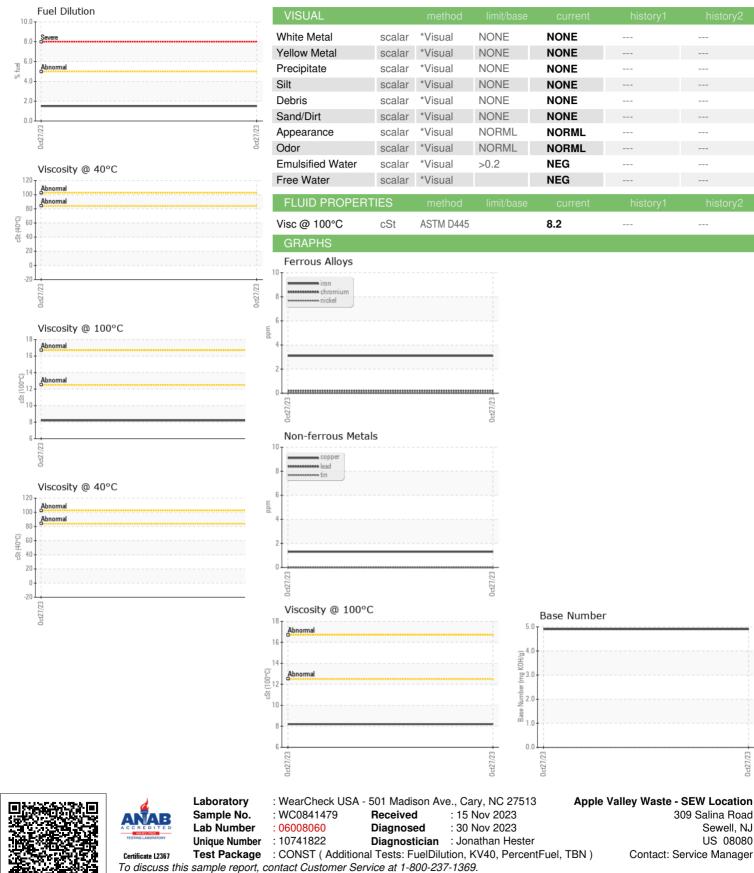
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--|---|---|--|--|--|--|
| Sample Number | | Client Info | | WC0841479 | | |
| Sample Date | | Client Info | | 27 Oct 2023 | | |
| Machine Age | mls | Client Info | | 84842 | | |
| Oil Age | mls | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINATION | N | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | | |
| Glycol | | WC Method | | NEG | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 3 | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | | |
| Nickel | ppm | ASTM D5185m | >4 | 0 | | |
| Titanium | ppm | ASTM D5185m | | <1 | | |
| Silver | ppm | ASTM D5185m | >3 | <1 | | |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | | |
| Lead | ppm | ASTM D5185m | >40 | 0 | | |
| Copper | ppm | ASTM D5185m | >330 | 1 | | |
| Tin | ppm | ASTM D5185m | >15 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | <1 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 50 | | |
| Barium | ppm | ASTM D5185m | | 0 | | |
| Molybdenum | ppm | ASTM D5185m | | 95 | | |
| Manganese | ppm | ASTM D5185m | | <1 | | |
| Magnesium | ppm | ASTM D5185m | | 499 | | |
| Calcium | ppm | | | | | |
| Phoophorup | | ASTM D5185m | | 943 | | |
| FIIOSPIIOIUS | | ASTM D5185m ASTM D5185m | | 943 536 | | |
| Phosphorus Zinc | ppm | | | | | |
| | | ASTM D5185m | | 536 | | |
| Zinc | ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base | 536 640 | | |
| Zinc Sulfur | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | | 536 640 2158 | | |
| Zinc Sulfur CONTAMINANTS | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m method | | 536 640 2158 current | history1 | history2 |
| Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | | 536 640 2158 current 12 | history1 | history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m | >25 | 536 640 2158 current 12 0 | history1 | history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m | >25 >20 | 536 640 2158 current 12 0 2 | history1 | history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >25 >20 >5 | 536 640 2158 current 12 0 2 1.5 current | history1 | history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED | ppm ppm ppm ppm ppm % | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 | >25 >20 >5 limit/base | 536 640 2158 current 12 0 2 1.5 current 0 | history1 history1 | history2 history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % | ppm ppm ppm ppm ppm % | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 | >25 >20 >5 limit/base >3 | 536 640 2158 current 12 0 2 1.5 current | history1 history1 | history2 history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm % % | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 | >25 >20 >5 limit/base >3 >20 | 536 640 2158 current 12 0 2 1.5 current 0 8.9 | history1 history1 | history2 history2 history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA | ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/cm Abs/cm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 Method *ASTM D7844 *ASTM D7624 *ASTM D7615 | >25 >20 >5 imit/base >3 >20 >30 | 536 640 2158 current 12 0 2 1.5 current 0 8.9 18.2 current | history1 history1 history1 | history2 history2 history2 |
| Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm % % | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 Method *ASTM D7844 *ASTM D7844 | >25 >20 >5 limit/base >3 >20 >30 | 536 640 2158 current 12 0 2 1.5 current 0 8.9 18.2 | history1 history1 history1 | history2 history2 history2 history2 |



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* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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