

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KENWORTH 427204-SW4830

Diesel Engine Fluid MOBIL DELVAC ELITE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

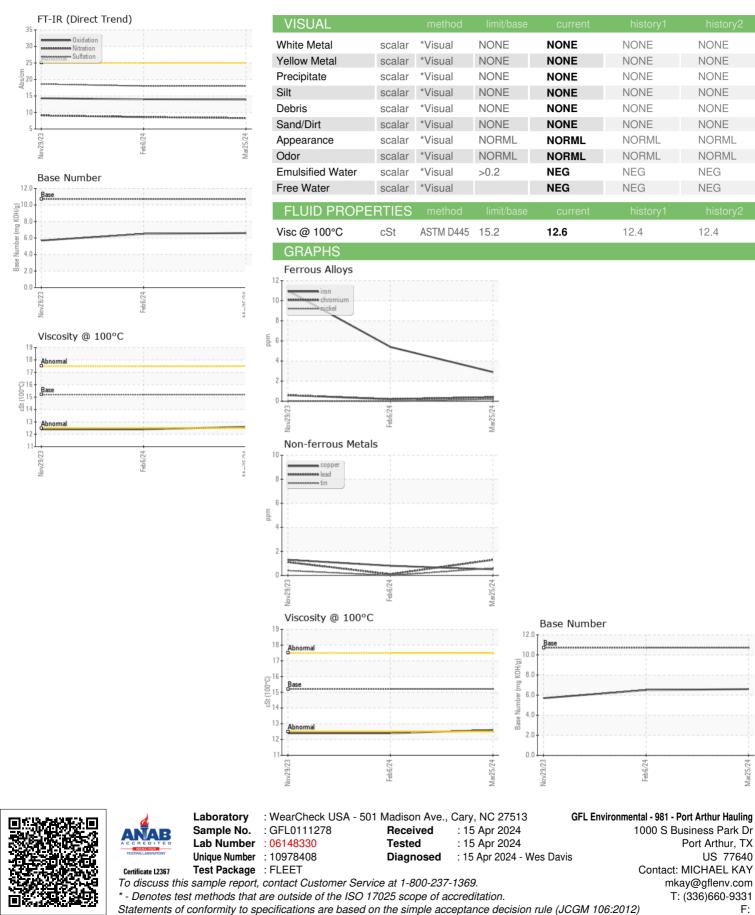
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
|---|--|--|--|--|---|---|
| Sample Number | | Client Info | | GFL0111278 | GFL0111338 | GFL0095441 |
| Sample Date | | Client Info | | 25 Mar 2024 | 06 Feb 2024 | 29 Nov 2023 |
| Machine Age | hrs | Client Info | | 15274 | 14931 | 14518 |
| Oil Age | hrs | Client Info | | 0 | 0 | 500 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | MARGINAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | 3 .9 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 3 | 5 | 11 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >40 | 1 | <1 | 1 |
| Copper | ppm | ASTM D5185m | >330 | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >15 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | | history1 98 | history2 92 |
| | ppm ppm | | limit/base | current | | |
| Boron | | ASTM D5185m | limit/base | current 124 | 98 | 92 |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | limit/base | current 124 0 | 98 0 | 92 0 |
| Boron Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 | 98 0 116 | 92 0 125 |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 | 98 0 116 0 | 92 0 125 <1 |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 | 98 0 116 0 630 | 92 0 125 <1 636 |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 1323 | 98 0 116 0 630 1243 | 92 0 125 <1 636 1192 643 790 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 1323 757 | 98 0 116 0 630 1243 695 | 92 0 125 <1 636 1192 643 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 1323 757 874 | 98 0 116 0 630 1243 695 774 | 92 0 125 <1 636 1192 643 790 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | Current 124 0 135 <1 699 1323 757 874 3544 | 98 0 116 0 630 1243 695 774 3068 history1 4 | 92 0 125 <1 636 1192 643 790 3501 history2 5 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 | 98 0 116 0 630 1243 695 774 3068 history1 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 1323 757 874 3544 current 5 | 98 0 116 0 630 1243 695 774 3068 history1 4 | 92 0 125 <1 636 1192 643 790 3501 history2 5 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 | 98 0 116 0 630 1243 695 774 3068 history1 4 2 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m | limit/base >25 >20 | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 2 | 98 0 116 0 630 1243 695 774 3068 history1 4 2 0 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 2 history2 0.9 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 2 current | 98 0 116 0 630 1243 695 774 3068 history1 4 2 0 0 history1 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base >3 | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 2 current 0.5 | 98 0 116 0 630 1243 695 774 3068 history1 4 2 0 history1 0.6 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 2 history2 0.9 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base >3 >20 | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 2 current 0.5 8.3 | 98 0 116 0 630 1243 695 774 3068 history1 4 2 0 history1 0.6 8.6 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 2 history2 0.9 9.1 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base >3 >20 >30 limit/base | current 124 0 135 <1 699 1323 757 874 3544 current 5 <1 2 current 0.5 8.3 18.0 | 98 0 116 0 630 1243 695 774 3068 history1 4 2 0 history1 0.6 8.6 18.0 | 92 0 125 <1 636 1192 643 790 3501 history2 5 0 2 history2 0.9 9.1 18.6 |



Base

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Submitted By: MICHAEL KAY

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