



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
KENWORTH 413062
 Component
Diesel Engine
 Fluid
MOBIL DELVAC ELITE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | GFL0111340 | GFL0095493 | --- |
| Sample Date | | Client Info | | 07 Feb 2024 | 13 Dec 2023 | --- |
| Machine Age | hrs | Client Info | | 3036 | 2717 | --- |
| Oil Age | hrs | Client Info | | 0 | 500 | --- |
| Filter Age | hrs | Client Info | | 0 | 500 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | Changed | Changed | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron | ppm | ASTM D5185m | >100 | 11 | 20 | --- |
| Chromium | ppm | ASTM D5185m | >20 | 0 | <1 | --- |
| Nickel | ppm | ASTM D5185m | >4 | 0 | <1 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | --- |
| Silver | ppm | ASTM D5185m | >3 | 0 | <1 | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 6 | 12 | --- |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | --- |
| Copper | ppm | ASTM D5185m | >330 | <1 | 2 | --- |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

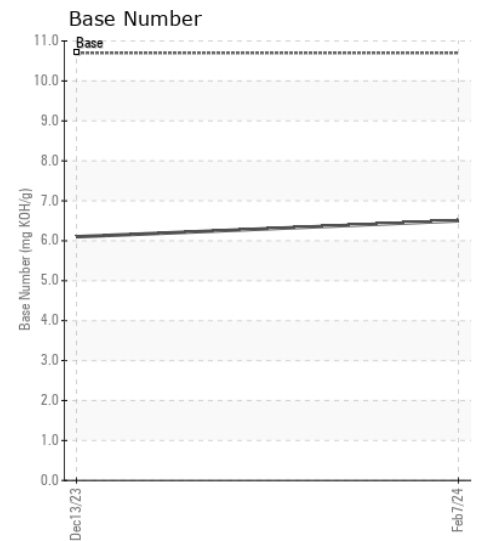
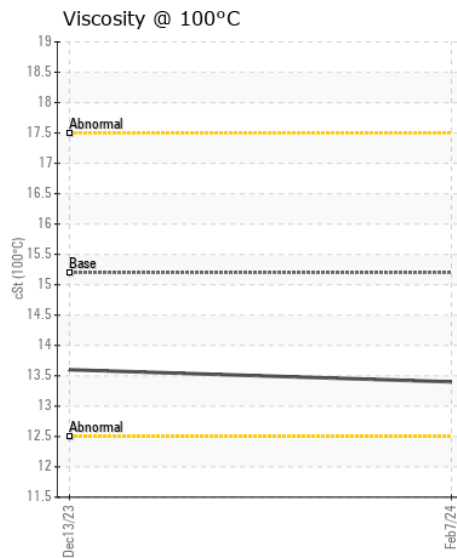
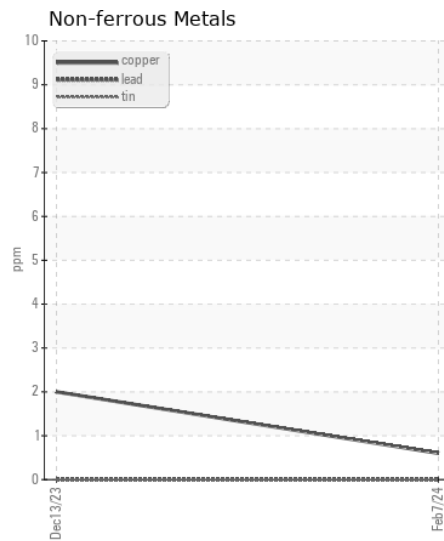
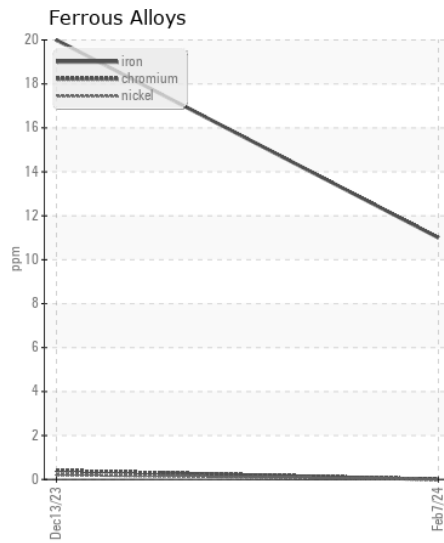
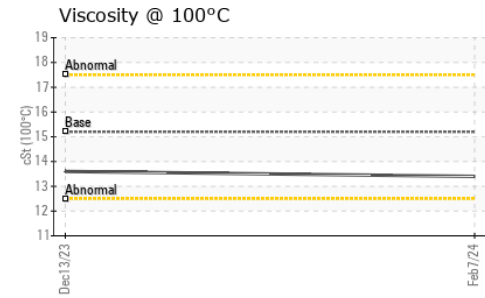
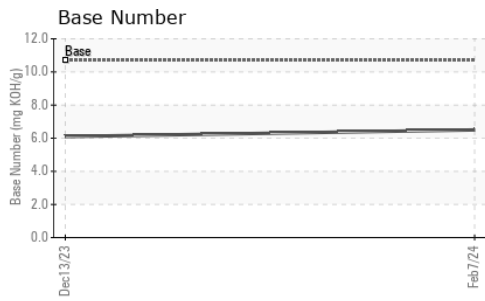
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-----|
| Silicon | ppm | ASTM D5185m | >25 | 7 | 10 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 9 | 26 | --- |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.2 | 0.2 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.7 | 10.3 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.9 | 18.7 | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | --- |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185m | | 1 | 2 | --- |
| Boron | ppm | ASTM D5185m | | 88 | 105 | --- |
| Barium | ppm | ASTM D5185m | | <1 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | 115 | 148 | --- |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | 654 | 787 | --- |
| Calcium | ppm | ASTM D5185m | | 1245 | 1453 | --- |
| Phosphorus | ppm | ASTM D5185m | | 716 | 795 | --- |
| Zinc | ppm | ASTM D5185m | | 805 | 977 | --- |
| Sulfur | ppm | ASTM D5185m | | 3152 | 4666 | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.4 | 16.7 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.7 | 6.5 | 6.1 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 15.2 | 13.4 | 13.6 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111340
Lab Number : 06101346
Unique Number : 10899576
Test Package : FLEET

Received : 27 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Don Baldrige

GFL Environmental - 981 - Port Arthur Hauling
 1000 S Business Park Dr
 Port Arthur, TX
 US 77640
 Contact: MICHAEL KAY
 mkay@gflenv.com
 T: (336)660-9331
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)