



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



Machine Id
MACK 529104-SW7928
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 | | GFL0111320 | GFL0095487 | --- |
| Sample Date | | Client Info | | 06 May 2024 | 15 Dec 2023 | --- |
| Machine Age | hrs | Client Info | | 7791 | 7555 | --- |
| Oil Age | hrs | Client Info | | 236 | 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 | >120 | 11 | 11 | --- |
| Chromium | ppm | ASTM D5185m | >20 | 0 | 0 | --- |
| Nickel | ppm | ASTM D5185m | >5 | <1 | 0 | --- |
| Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | 3 | --- |
| Lead | ppm | ASTM D5185m | >40 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185m | >330 | 2 | 1 | --- |
| Tin | ppm | ASTM D5185m | >15 | 0 | 1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

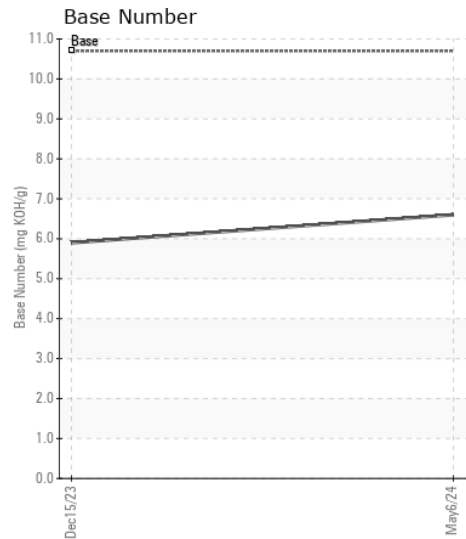
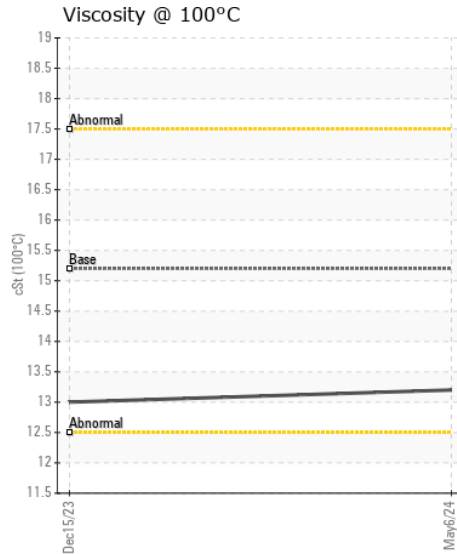
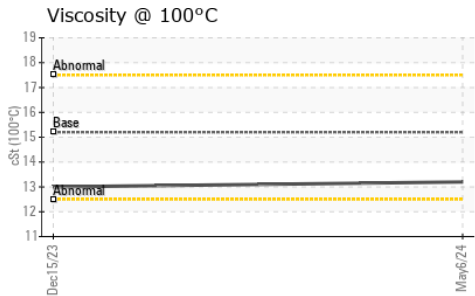
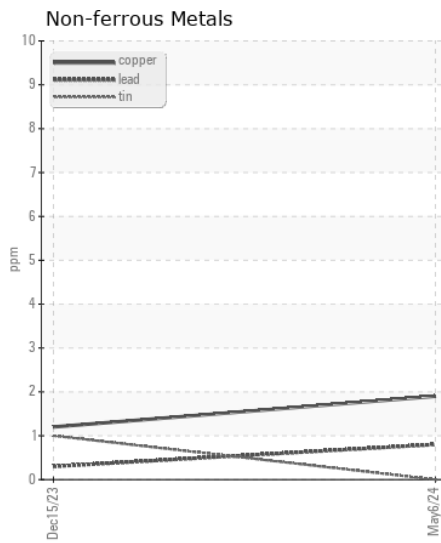
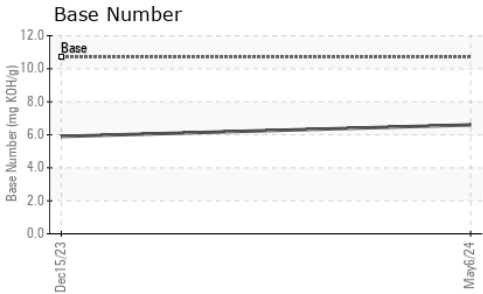
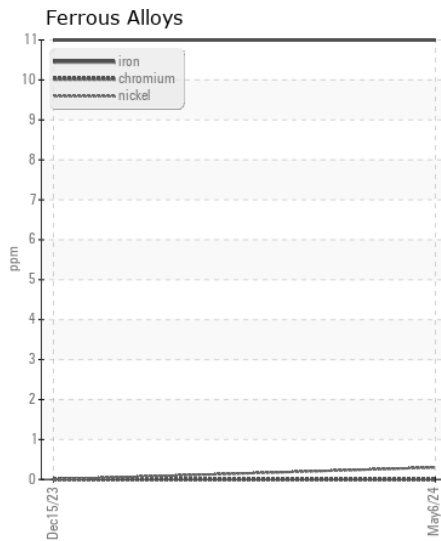
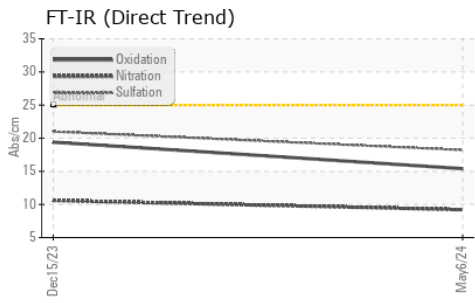
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-----|
| Silicon | ppm | ASTM D5185m | >25 | 4 | 5 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 2 | --- |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | *ASTM D7844 | >4 | 0.2 | 0.3 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.2 | 10.6 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 18.2 | 21.0 | --- |
| 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 suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185m | | 3 | 4 | --- |
| Boron | ppm | ASTM D5185m | | 95 | 21 | --- |
| Barium | ppm | ASTM D5185m | | 0 | <1 | --- |
| Molybdenum | ppm | ASTM D5185m | | 120 | 85 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | 680 | 610 | --- |
| Calcium | ppm | ASTM D5185m | | 1269 | 1429 | --- |
| Phosphorus | ppm | ASTM D5185m | | 794 | 742 | --- |
| Zinc | ppm | ASTM D5185m | | 872 | 847 | --- |
| Sulfur | ppm | ASTM D5185m | | 3863 | 2761 | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.4 | 19.4 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.7 | 6.6 | 5.9 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 15.2 | 13.2 | 13.0 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111320 **Received** : 09 Jul 2024
Lab Number : 06231206 **Tested** : 10 Jul 2024
Unique Number : 11114699 **Diagnosed** : 10 Jul 2024 - Wes Davis
Test Package : FLEET

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)