



OIL ANALYSIS REPORT

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

Machine Id
FREIGHTLINER 38732

Component
Diesel Engine

Fluid
MOBIL 15W40 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

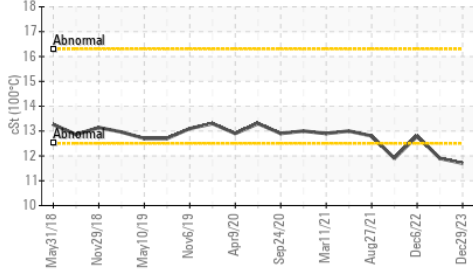
| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0725044 | WC0725107 | WC0725066 |
| Sample Date | | Client Info | | 29 Dec 2023 | 14 Mar 2023 | 06 Dec 2022 |
| Machine Age | mls | Client Info | | 183982 | 163280 | 155690 |
| Oil Age | mls | Client Info | | 0 | 7590 | 8100 |
| Filter Age | mls | Client Info | | 0 | 7590 | 8100 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | Changed | Changed |
| Sample Status | | | | ATTENTION | ATTENTION | NORMAL |

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >80 | 22 | 12 | 15 |
| Chromium | ppm | ASTM D5185m | >5 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | 4 | 3 | 5 |
| Lead | ppm | ASTM D5185m | >30 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >150 | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >5 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

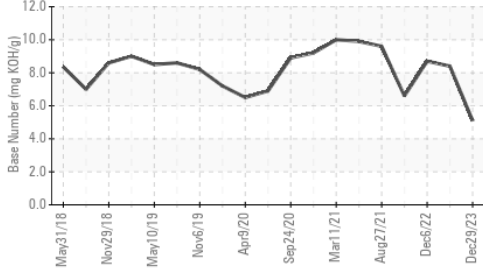
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >20 | 5 | 4 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 2 |
| Fuel | | WC Method | >5 | <1.0 | 1.7 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.5 | 0.4 | 0.5 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.7 | 9.1 | 9.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.8 | 19.9 | 20.2 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |

| | | | | | | |
|------------------|----------|-------------|------|---------------|--------|------|
| Sodium | ppm | ASTM D5185m | >118 | 1 | 2 | 1 |
| Boron | ppm | ASTM D5185m | | 9 | 9 | 8 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 20 | 66 | 74 |
| Manganese | ppm | ASTM D5185m | | <1 | 1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 161 | 890 | 910 |
| Calcium | ppm | ASTM D5185m | | 2173 | 1164 | 1306 |
| Phosphorus | ppm | ASTM D5185m | | 948 | 970 | 1061 |
| Zinc | ppm | ASTM D5185m | | 1174 | 1164 | 1299 |
| Sulfur | ppm | ASTM D5185m | | 3439 | 3157 | 3866 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.8 | 15.6 | 16.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 5.1 | 8.4 | 8.7 |
| Visc @ 100°C | cSt | ASTM D445 | | ▲ 11.7 | ▲ 11.9 | 12.8 |

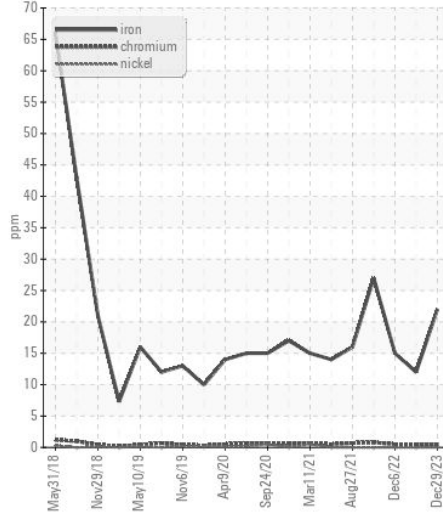
▲ Viscosity @ 100°C



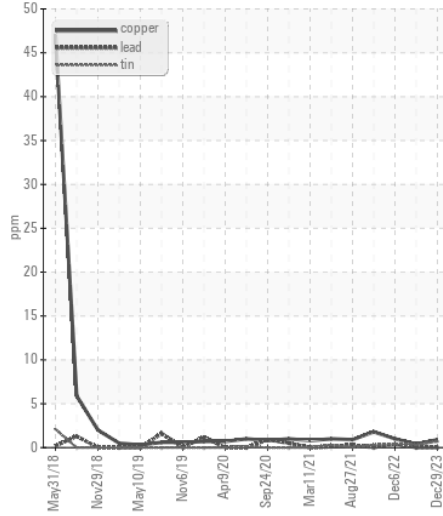
Base Number



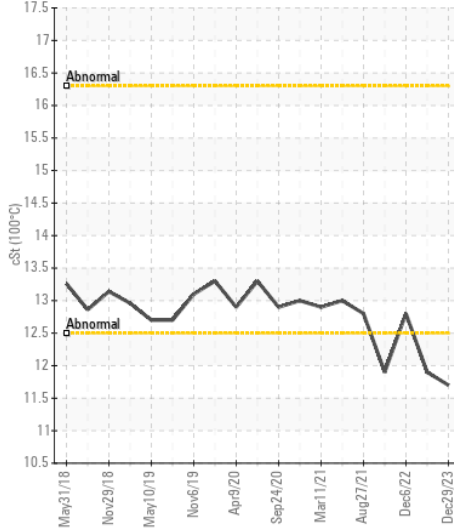
Ferrous Alloys



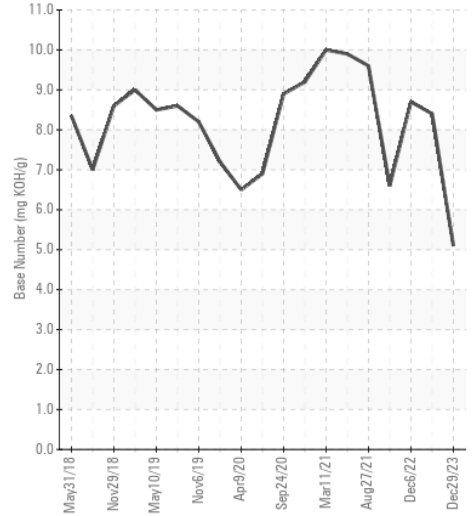
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0725044

Lab Number : 06084232

Unique Number : 10871677

Test Package : FLEET

Received : 08 Feb 2024

Tested : 09 Feb 2024

Diagnosed : 12 Feb 2024 - Don Baldrige

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE

WINSTON SALEM, NC

US 27105

Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com

T: (336)767-9642

F: x:

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)