



LIEBHERR

OIL ANALYSIS REPORT

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



Area
(359465)
Machine Id
LIEBHERR L556 064990-1757
Component
Diesel Engine
Fluid
PETRO CANADA SUPREME 5W30 (32 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | LH0294738 | LH0250857 | LH0276892 |
| Sample Date | | Client Info | | 11 Jun 2024 | 11 Jan 2024 | 24 Oct 2023 |
| Machine Age | hrs | Client Info | | 11958 | 9970 | 9023 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185(m) | >100 | 4 | 5 | 7 |
| Chromium | ppm | ASTM D5185(m) | >5 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >5 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >15 | 1 | 2 | 4 |
| Lead | ppm | ASTM D5185(m) | >30 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185(m) | >125 | 1 | 1 | 2 |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |

CONTAMINATION

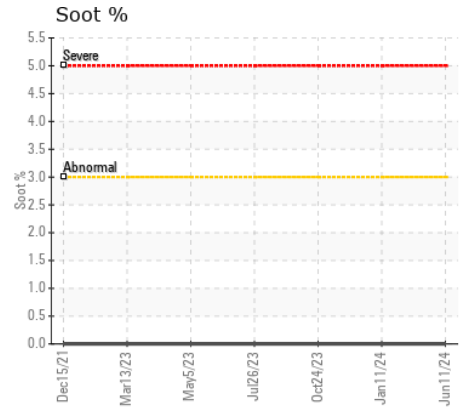
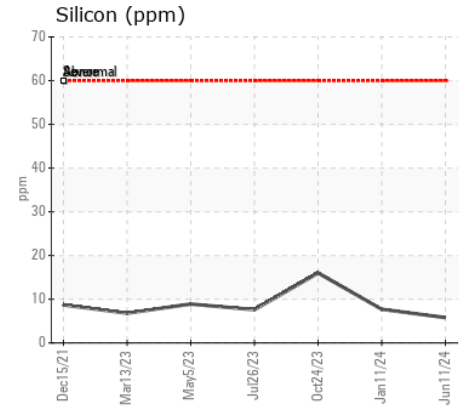
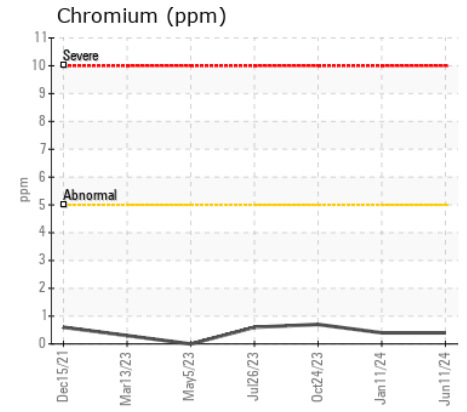
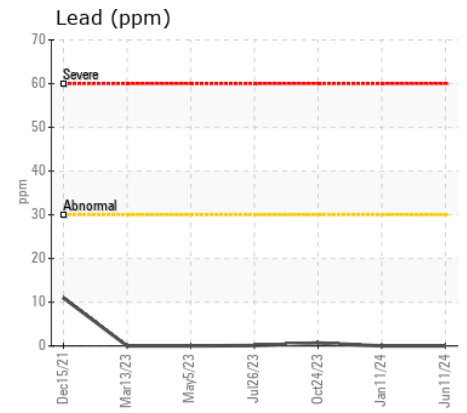
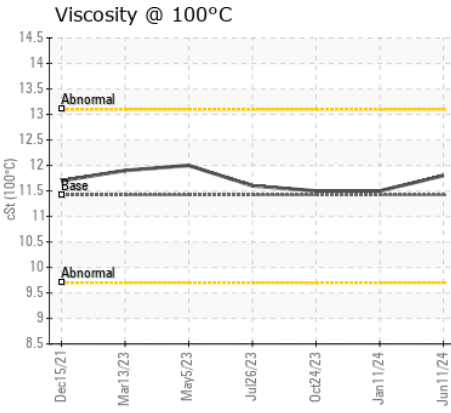
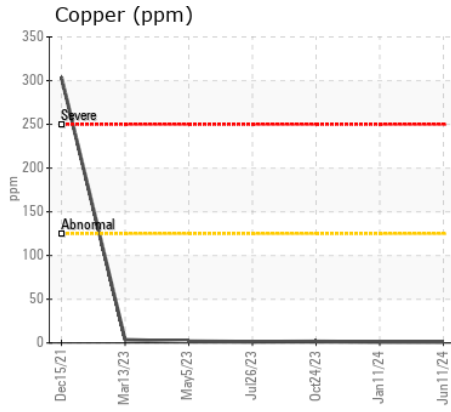
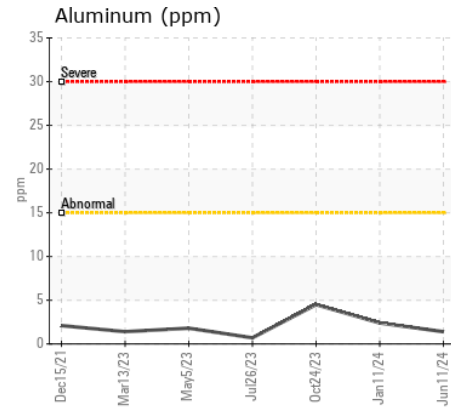
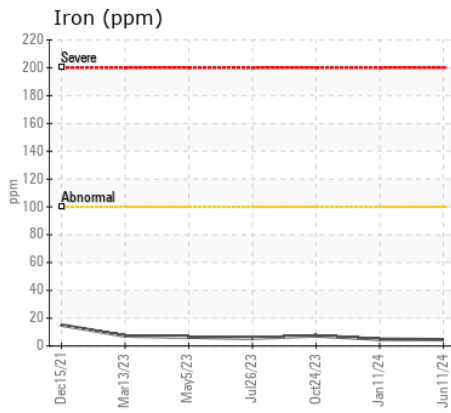
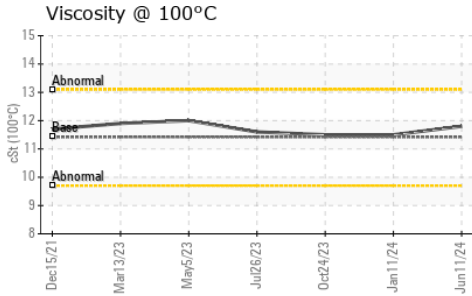
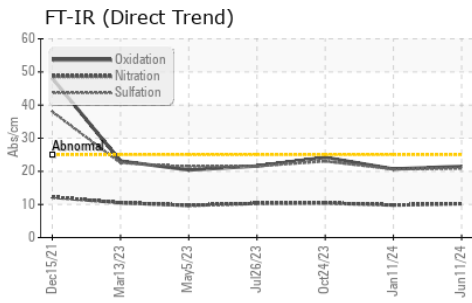
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >60 | 6 | 8 | 16 |
| Potassium | ppm | ASTM D5185(m) | >20 | 3 | 2 | 4 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 10.2 | 9.8 | 10.4 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 20.8 | 20.6 | 23.0 |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|--------------|----------|---------------|-------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 5 | 4 | 4 |
| Boron | ppm | ASTM D5185(m) | 186 | 23 | 30 | 19 |
| Barium | ppm | ASTM D5185(m) | <1 | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 79 | 57 | 76 | 56 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 578 | 1103 | 1025 | 1095 |
| Calcium | ppm | ASTM D5185(m) | 1002 | 801 | 856 | 797 |
| Phosphorus | ppm | ASTM D5185(m) | 745 | 989 | 977 | 1006 |
| Zinc | ppm | ASTM D5185(m) | 837 | 1182 | 1122 | 1177 |
| Sulfur | ppm | ASTM D5185(m) | 2502 | 2697 | 2737 | 2644 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 21.5 | 20.7 | 24.2 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 11.42 | 11.8 | 11.5 | 11.5 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0294738 **Received** : 28 Jun 2024
Lab Number : 02644535 **Tested** : 28 Jun 2024
Unique Number : 5802074 **Diagnosed** : 28 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

Eacom Timber Corporation
 100 Old Nairn Centre Road
 Nairn Centre, ON
 CA P0M 2L0
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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