



OIL ANALYSIS REPORT

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

Machine Id
MX-13 8464383
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | RPL0020395 | RPL0017918 | RPL0016355 |
| Sample Date | | Client Info | | 15 May 2024 | 22 Feb 2024 | 29 Nov 2023 |
| Machine Age | mls | Client Info | | 270410 | 261247 | 257954 |
| Oil Age | mls | Client Info | | 22580 | 3404 | 257954 |
| Filter Age | mls | Client Info | | 22580 | 3404 | 0 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 13 | 5 | 46 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | 3 | 5 |
| Lead | ppm | ASTM D5185m | >40 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >330 | 3 | 2 | 6 |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

There is no indication of any contamination in the oil.

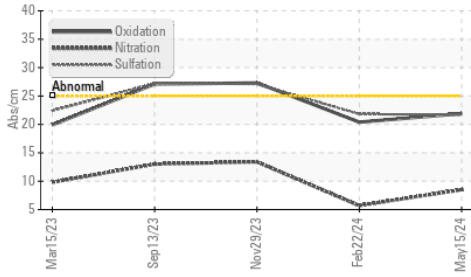
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 9 | 8 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 0 | 6 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.3 | 0.1 | 0.6 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.5 | 5.7 | 13.4 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.7 | 21.8 | 27.1 |
| 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 |

FLUID CONDITION

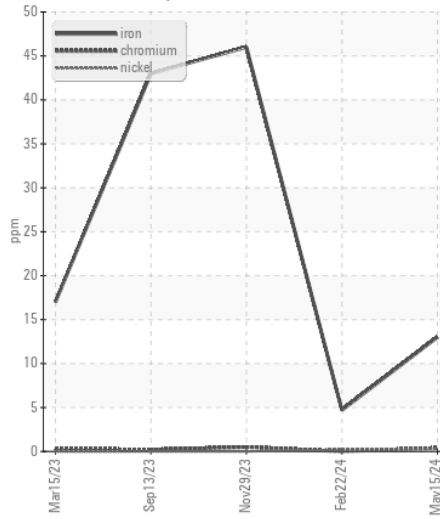
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|-----|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 4 | 2 | 5 |
| Boron | ppm | ASTM D5185m | 0 | 33 | 52 | 4 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 43 | 39 | 62 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 1 |
| Magnesium | ppm | ASTM D5185m | 0 | 528 | 525 | 1052 |
| Calcium | ppm | ASTM D5185m | | 1612 | 1581 | 1221 |
| Phosphorus | ppm | ASTM D5185m | | 797 | 817 | 1175 |
| Zinc | ppm | ASTM D5185m | | 953 | 958 | 1437 |
| Sulfur | ppm | ASTM D5185m | | 2651 | 2581 | 3046 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 21.9 | 20.4 | 27.3 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.4 | 8.9 | 10.4 | 5.4 |
| Visc @ 100°C | cSt | ASTM D445 | 14 | 13.3 | 13.0 | 15.5 |

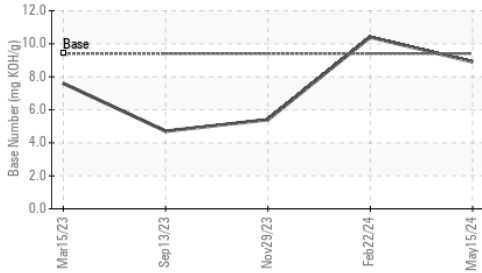
FT-IR (Direct Trend)



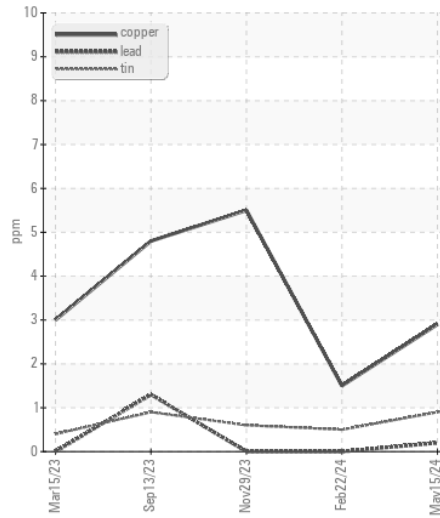
Ferrous Alloys



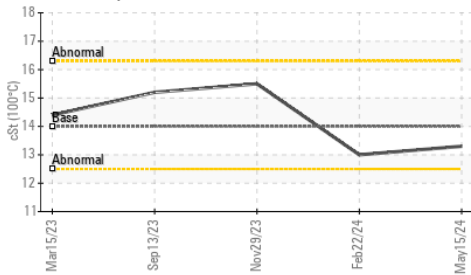
Base Number



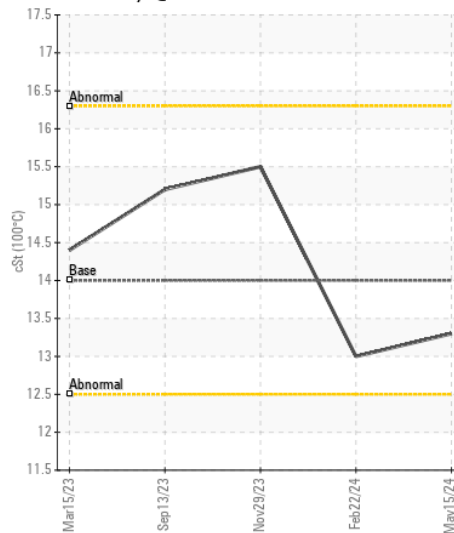
Non-ferrous Metals



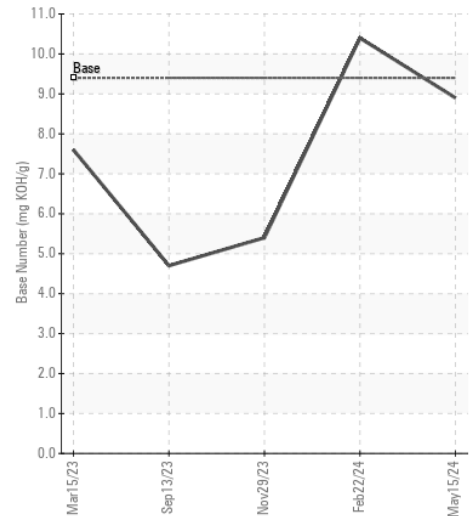
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0020395
Lab Number : 06197335
Unique Number : 11059458
Test Package : FLEET

Received : 03 Jun 2024
Tested : 04 Jun 2024
Diagnosed : 04 Jun 2024 - Wes Davis

RTL PACLEASE - 7006 - Pico Rivera
 7837 Telegraph Rd
 Pico Rivera, CA
 US 90660
 Contact: GERARDO CARROLA
 carrolag@rushenterprises.com

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)

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