



OIL ANALYSIS REPORT

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

Machine Id
PETERBILT 957-1558
Component
Diesel Engine
Fluid
MOBIL 15W40 (45 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | RPL0015897 | RPL0012563 | RPL0009509 |
| Sample Date | | Client Info | | 26 Mar 2024 | 07 Jul 2023 | 14 Apr 2023 |
| Machine Age | mls | Client Info | | 194979 | 117001 | 108779 |
| Oil Age | mls | Client Info | | 27457 | 77643 | 14879 |
| Filter Age | mls | Client Info | | 27457 | 77643 | 14879 |
| Oil Changed | | Client Info | | Changed | N/A | N/A |
| Filter Changed | | Client Info | | Changed | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 29 | 34 | 29 |
| Chromium | ppm | ASTM D5185m | >20 | 2 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 2 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | 7 | 8 | 4 |
| Lead | ppm | ASTM D5185m | >40 | 3 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >330 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >15 | 2 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| 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.

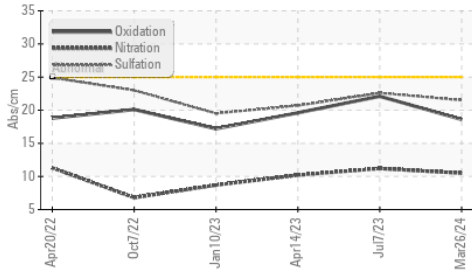
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 7 | 7 | 7 |
| Potassium | ppm | ASTM D5185m | >20 | 21 | 21 | 18 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.3 | 0.5 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.5 | 11.2 | 10.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.5 | 22.6 | 20.7 |
| 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

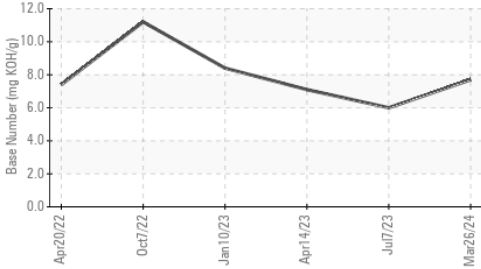
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >118 | <1 | 2 | 1 |
| Boron | ppm | ASTM D5185m | | 4 | 28 | 43 |
| Barium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 63 | 88 | 90 |
| Manganese | ppm | ASTM D5185m | | 2 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 836 | 656 | 653 |
| Calcium | ppm | ASTM D5185m | | 1121 | 1561 | 1434 |
| Phosphorus | ppm | ASTM D5185m | | 977 | 783 | 782 |
| Zinc | ppm | ASTM D5185m | | 1104 | 967 | 951 |
| Sulfur | ppm | ASTM D5185m | | 2829 | 3288 | 3502 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.6 | 22.1 | 19.6 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.7 | 6.0 | 7.1 |
| Visc @ 100°C | cSt | ASTM D445 | | 12.6 | 13.7 | 13.6 |

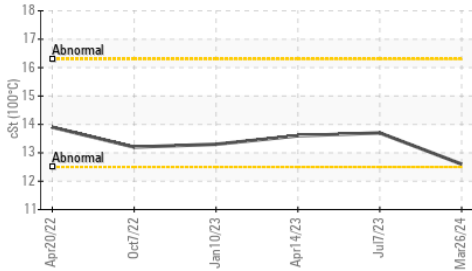
FT-IR (Direct Trend)



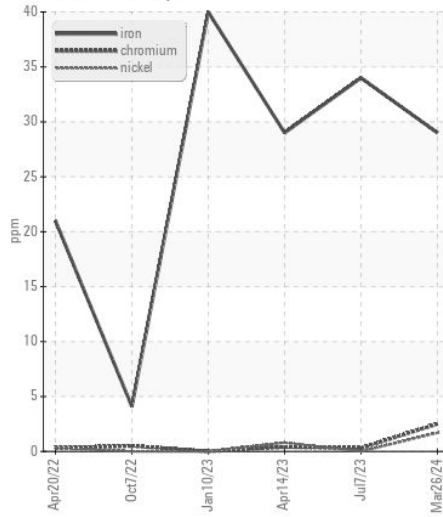
Base Number



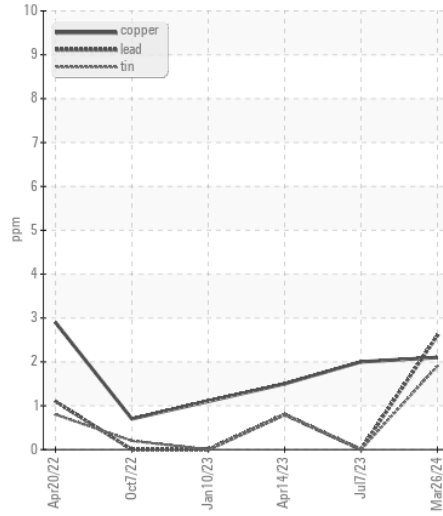
Viscosity @ 100°C



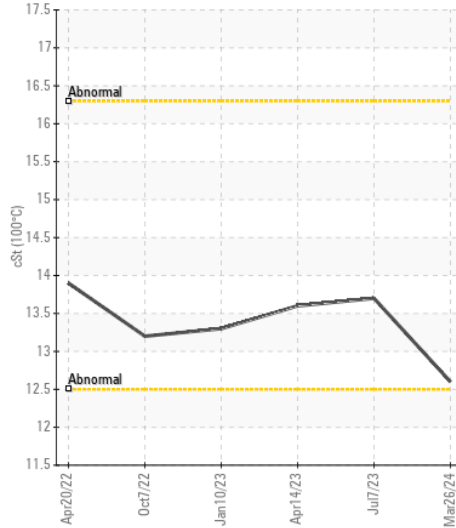
Ferrous Alloys



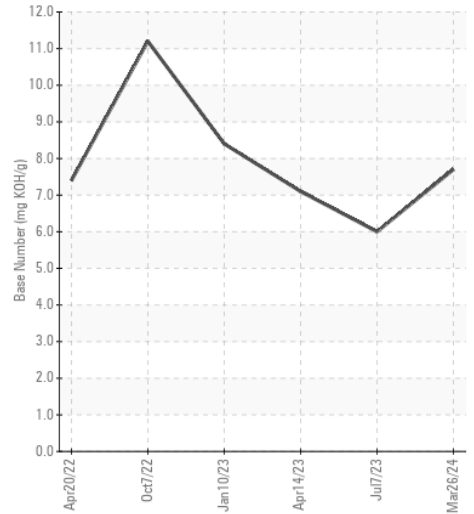
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0015897
Lab Number : 06146863
Unique Number : 10976941
Test Package : FLEET

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Sean Felton

RTL PACLEASE - 7004 - Austin
 1205 Smith Road
 Austin, TX
 US 78721

Contact: David Johnson
 JohnsonD@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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F: