



OIL ANALYSIS REPORT

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

Machine Id
PETERBILT 459648
 Component
1 Diesel Engine
 Fluid
MOBIL 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | RPL0011797 | --- | --- |
| Sample Date | | Client Info | | 07 May 2024 | --- | --- |
| Machine Age | mls | Client Info | | 10893 | --- | --- |
| Oil Age | mls | Client Info | | 10893 | --- | --- |
| Filter Age | mls | Client Info | | 10893 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

WEAR

Metal levels are typical for a new component breaking in.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >110 | 28 | --- | --- |
| Chromium | ppm | ASTM D5185m | >4 | 1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >2 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >25 | 8 | --- | --- |
| Lead | ppm | ASTM D5185m | >45 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m | >85 | 27 | --- | --- |
| Tin | ppm | ASTM D5185m | >4 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

There is no indication of any contamination in the oil.

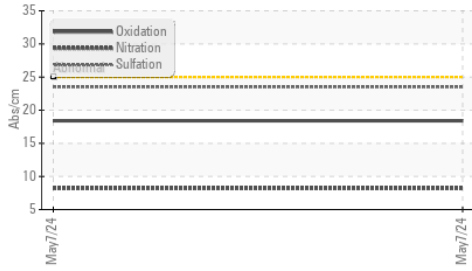
| | | | | | | |
|------------------|----------|-------------|-------|-------|-----|-----|
| Silicon | ppm | ASTM D5185m | >30 | 29 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 16 | --- | --- |
| Fuel | | WC Method | >5 | <1.0 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Glycol | | WC Method | | NEG | --- | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | --- | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.2 | --- | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.5 | --- | --- |
| 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 | --- | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | --- | --- |

FLUID CONDITION

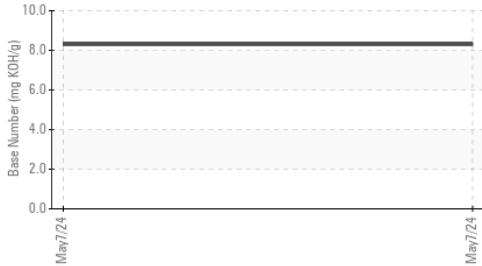
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|------|-----|-----|
| Sodium | ppm | ASTM D5185m | >118 | 4 | --- | --- |
| Boron | ppm | ASTM D5185m | | 268 | --- | --- |
| Barium | ppm | ASTM D5185m | | 8 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | 116 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 5 | --- | --- |
| Magnesium | ppm | ASTM D5185m | | 703 | --- | --- |
| Calcium | ppm | ASTM D5185m | | 1566 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | 721 | --- | --- |
| Zinc | ppm | ASTM D5185m | | 870 | --- | --- |
| Sulfur | ppm | ASTM D5185m | | 2836 | --- | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.4 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.3 | --- | --- |
| Visc @ 100°C | cSt | ASTM D445 | | 12.5 | --- | --- |

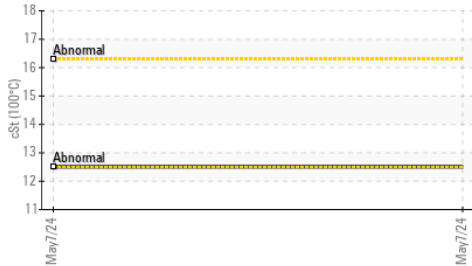
FT-IR (Direct Trend)



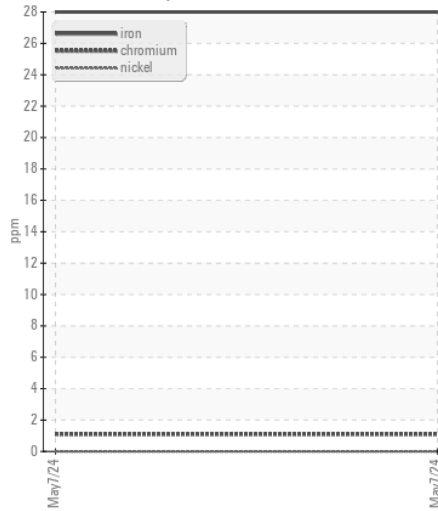
Base Number



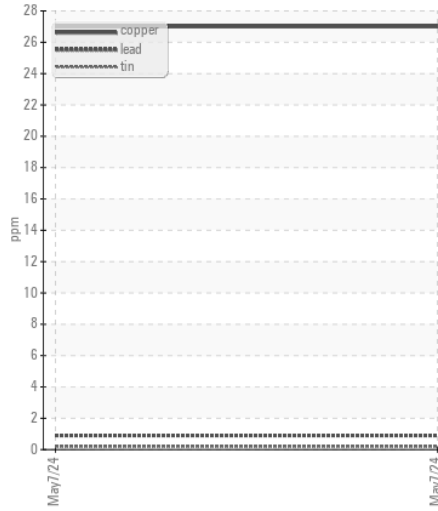
Viscosity @ 100°C



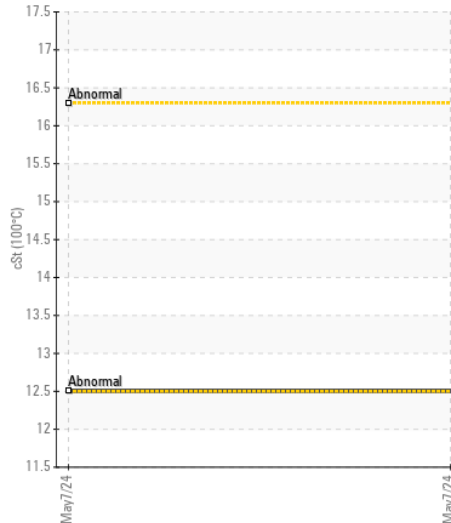
Ferrous Alloys



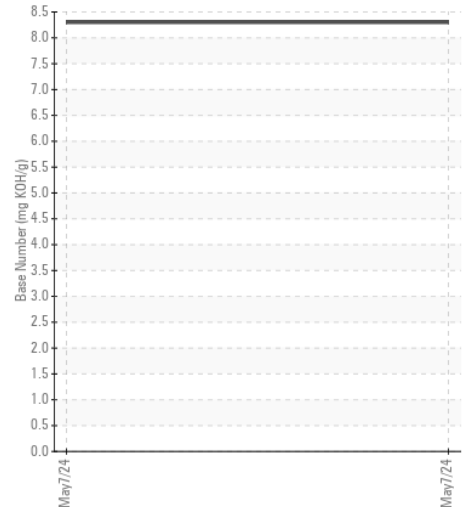
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0011797

Lab Number : 06176897

Unique Number : 11022950

Test Package : FLEET

Received : 13 May 2024

Tested : 14 May 2024

Diagnosed : 14 May 2024 - Sean Felton

RTL PACLEASE - 7018 - West Texas

1230 South Grandview

Odessa, TX

US 79761

Contact: David Johnson

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T: (512)401-7063

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)