



OIL ANALYSIS REPORT

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

Machine Id
PETERBILT 21722
Component
Diesel Engine
Fluid
SHELL ROTELLA T 10W30 (48 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0955676 | WC0909730 | WC0909771 |
| Sample Date | | Client Info | | 08 Jul 2024 | 08 May 2024 | 03 Mar 2024 |
| Machine Age | mls | Client Info | | 304312 | 296243 | 284775 |
| Oil Age | mls | Client Info | | 8069 | 14716 | 13200 |
| Filter Age | mls | Client Info | | 8069 | 14716 | 13200 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >110 | 20 | 4 | 10 |
| Chromium | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 4 | 1 | 3 |
| Lead | ppm | ASTM D5185m | >45 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >85 | 1 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 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.

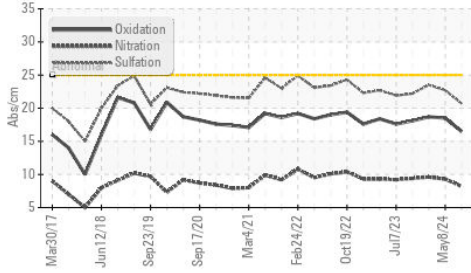
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >30 | 7 | 4 | 5 |
| Potassium | ppm | ASTM D5185m | >20 | 9 | 8 | 12 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.2 | 0.2 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.2 | 9.3 | 9.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.7 | 22.7 | 23.5 |
| 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

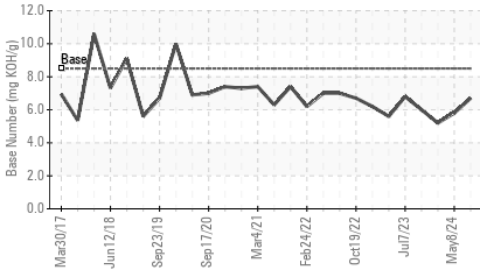
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | <1 | 1 | 2 |
| Boron | ppm | ASTM D5185m | 269 | 89 | 129 | 105 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 16 | 1 | 7 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 20 | 212 | 29 | 63 |
| Calcium | ppm | ASTM D5185m | 1521 | 2052 | 2264 | 2082 |
| Phosphorus | ppm | ASTM D5185m | 948 | 999 | 1008 | 969 |
| Zinc | ppm | ASTM D5185m | 893 | 1188 | 1212 | 1207 |
| Sulfur | ppm | ASTM D5185m | | 3021 | 3836 | 3288 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.5 | 18.5 | 18.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 8.5 | 6.7 | 5.8 | 5.2 |
| Visc @ 100°C | cSt | ASTM D445 | 11.0 | 11.8 | 12.0 | 11.9 |

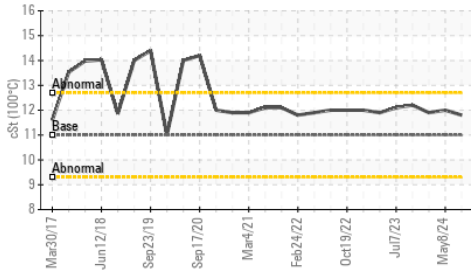
FT-IR (Direct Trend)



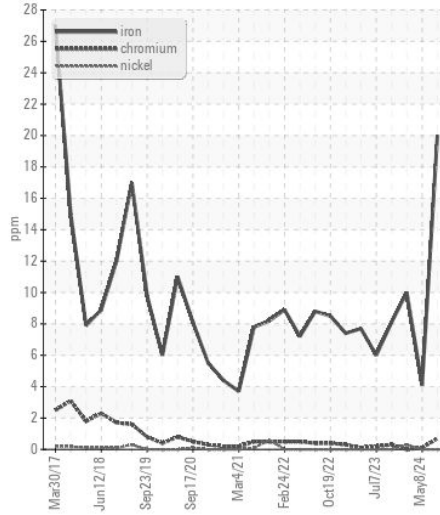
Base Number



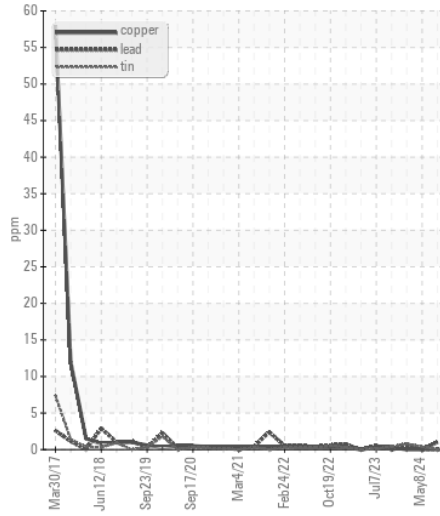
Viscosity @ 100°C



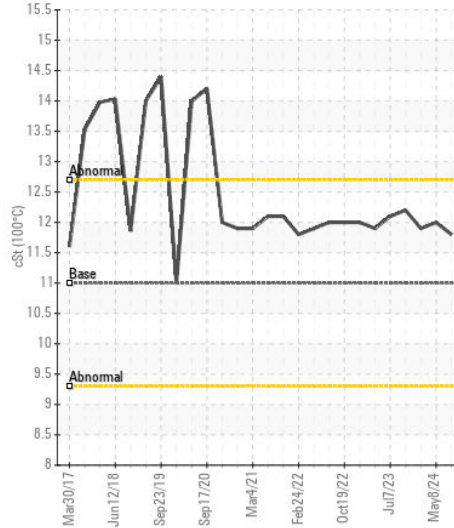
Ferrous Alloys



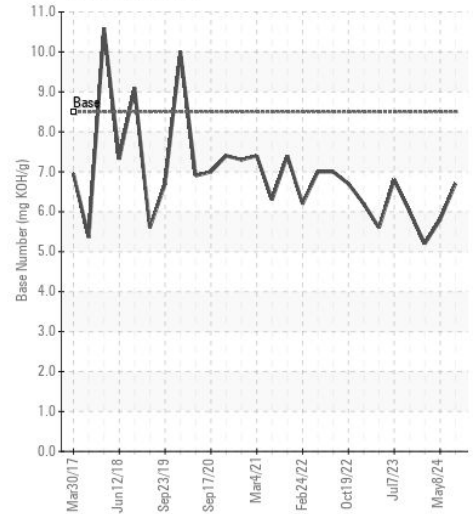
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0955676
Lab Number : 06234682
Unique Number : 11123516
Test Package : FLEET

Received : 12 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Wes Davis

GUY M TURNER & TURNER TRANSFER
 4505 SOUTH HOLDEN ROAD
 GREENSBORO, NC
 US 27406

Contact: ROGER HIXSON
 rhixson@guyturner.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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