MOB I

Dura-Check Fluid Analysis

# OIL ANALYSIS REPORT

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

Machine Id
## KENWORTH M21427
Component
## Diesel Engine
Fluid
## DIESEL ENGINE OIL SAE 15W40 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

## CONTAMINATION

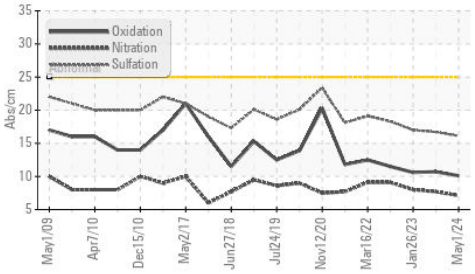
There is no indication of any contamination in the oil.

## FLUID CONDITION

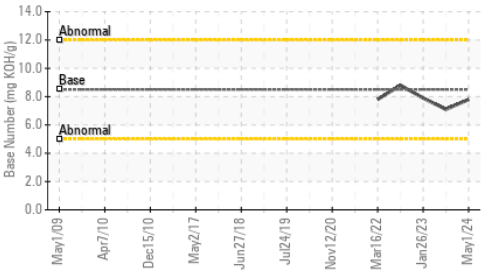
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | DC0034113 | DC0028247 | DC0023040 |
| Sample Date | | Client Info | | 01 May 2024 | 06 Oct 2023 | 26 Jan 2023 |
| Machine Age | mls | Client Info | | 264640 | 262460 | 25826 |
| Oil Age | mls | Client Info | | 0 | 0 | 0 |
| Filter Age | mls | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | ATTENTION |
| Iron | ppm | ASTM D5185m | >100 | 5 | 10 | 8 |
| Chromium | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | <1 | 1 | <1 |
| Lead | ppm | ASTM D5185m | >40 | 1 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >330 | <1 | 2 | 1 |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >25 | 8 | 18 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 4 | 2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | 1.7 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.1 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.1 | 7.7 | 8.0 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 16.1 | 16.7 | 17.0 |
| 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 |
| Sodium | ppm | ASTM D5185m | >158 | <1 | 2 | <1 |
| Boron | ppm | ASTM D5185m | 250 | 4 | 6 | 0 |
| Barium | ppm | ASTM D5185m | 10 | 0 | 11 | 0 |
| Molybdenum | ppm | ASTM D5185m | 100 | 6 | 5 | 2 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 450 | 91 | 78 | 33 |
| Calcium | ppm | ASTM D5185m | 3000 | 2281 | 2143 | 2237 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 980 | 884 | 850 |
| Zinc | ppm | ASTM D5185m | 1350 | 1082 | 1056 | 1000 |
| Sulfur | ppm | ASTM D5185m | 4250 | 4333 | 3603 | 3715 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 10.1 | 10.7 | 10.6 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 8.5 | 7.8 | 7.1 | 7.9 |
| Visc @ 100°C | cSt | ASTM D445 | 14.4 | 12.8 | 12.8 | 12.3 |

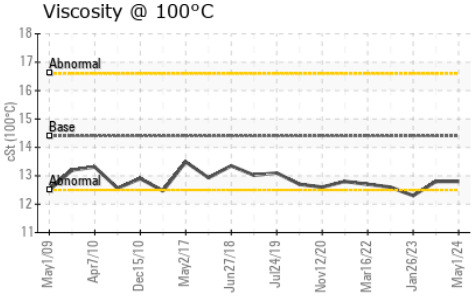
FT-IR (Direct Trend)



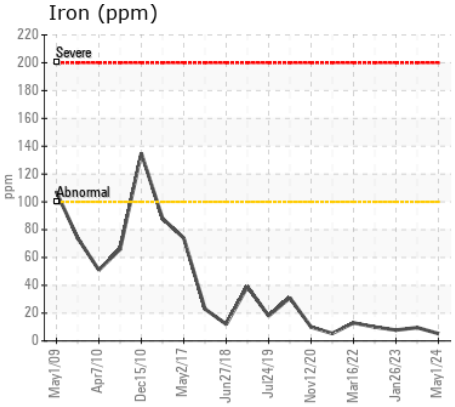

Base Number



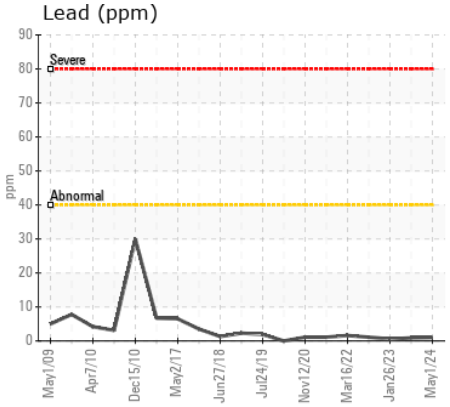

Viscosity @ 100°C



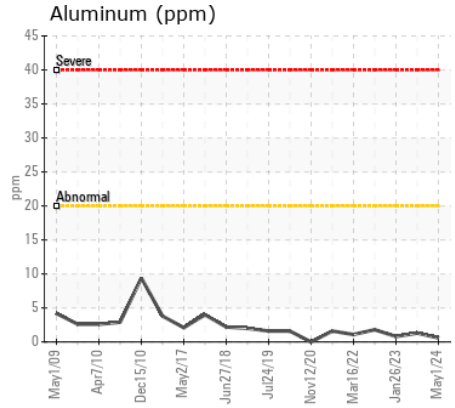

Iron (ppm)



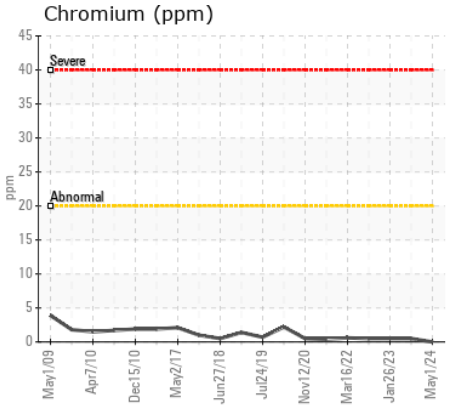

Lead (ppm)



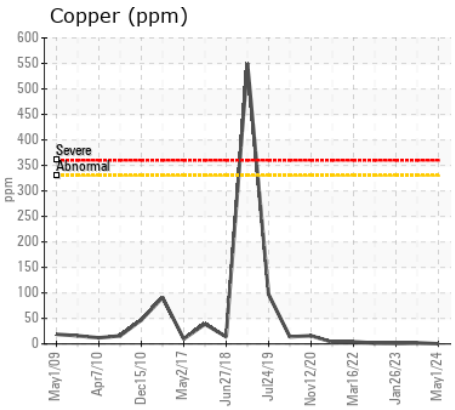

Aluminum (ppm)



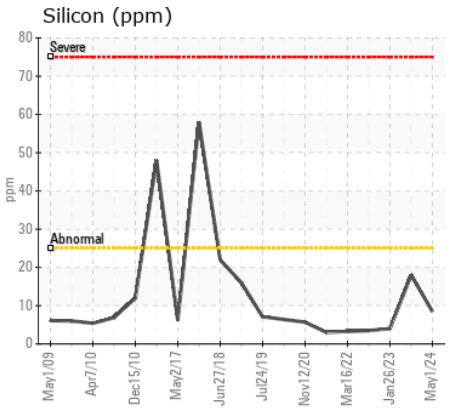

Chromium (ppm)



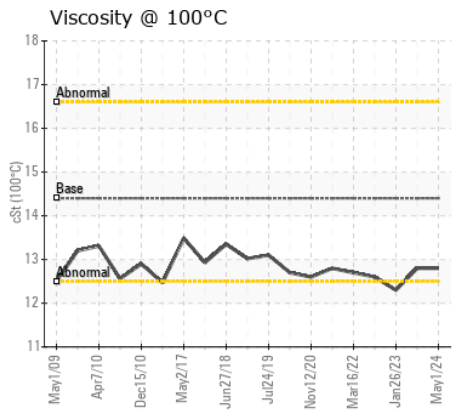

Copper (ppm)



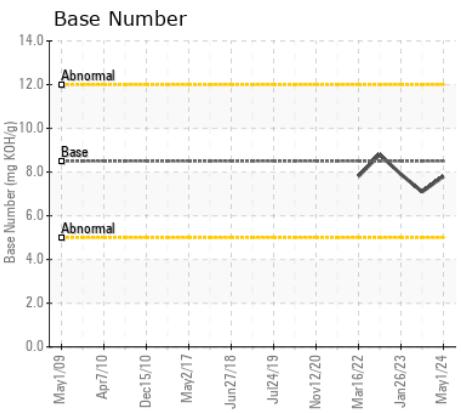

Silicon (ppm)




Viscosity @ 100°C




Base Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : DC0034113 **Received** : 21 May 2024
**Lab Number** : 06187155 **Tested** : 23 May 2024
**Unique Number** : 11043907 **Diagnosed** : 23 May 2024 - Wes Davis
**Test Package** : MOB 1 ( Additional Tests: TBN )

*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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