MOB I

WEAR CHECK

# OIL ANALYSIS REPORT

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

Area
**[24175]**
Machine Id
**22-129**
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

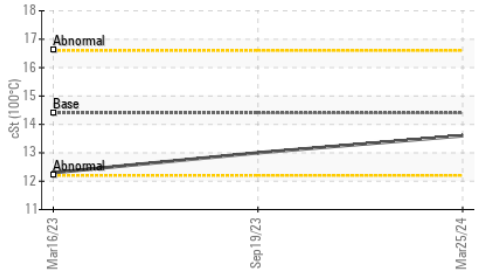
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

## FLUID CONDITION

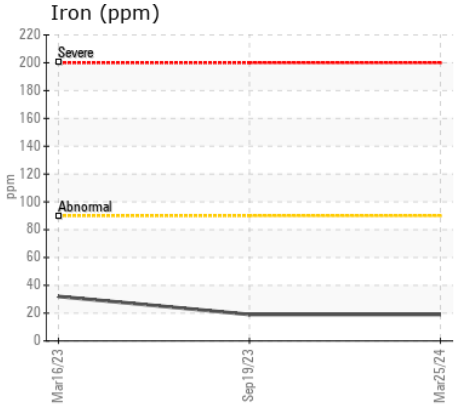
The condition of the oil is acceptable for the time in service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0895517** | WC0842909 | WC0794743 |
| Sample Date | | Client Info | | **25 Mar 2024** | 19 Sep 2023 | 16 Mar 2023 |
| Machine Age | hrs | Client Info | | **3919** | 38874 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Filter Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **Changed** | Changed | Changed |
| Filter Changed | | Client Info | | **Changed** | Changed | Changed |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |
| Iron | ppm | ASTM D5185(m) | >90 | **19** | 19 | 32 |
| Chromium | ppm | ASTM D5185(m) | >20 | **<1** | 1 | 2 |
| Nickel | ppm | ASTM D5185(m) | >2 | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | >2 | **0** | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >2 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | **12** | 25 | 25 |
| Lead | ppm | ASTM D5185(m) | >40 | **0** | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >330 | **<1** | <1 | 1 |
| Tin | ppm | ASTM D5185(m) | >15 | **0** | 0 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silicon | ppm | ASTM D5185(m) | >25 | **4** | 6 | 6 |
| Potassium | ppm | ASTM D5185(m) | >20 | **25** | 47 | 55 |
| Fuel | | WC Method | >3.0 | **<1.0** | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | **NEG** | NEG | NEG |
| Glycol | | WC Method | | **NEG** | NEG | NEG |
| Soot % | % | ASTM D7844* | >6 | **0.4** | 0.3 | 0.3 |
| Nitration | Abs/cm | ASTM D7624* | >20 | **7.7** | 8.3 | 8.9 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | **22.7** | 22.9 | 25.2 |
| Emulsified Water | scalar | Visual* | >0.2 | **NEG** | NEG | NEG |
| Sodium | ppm | ASTM D5185(m) | >158 | **3** | 3 | 3 |
| Boron | ppm | ASTM D5185(m) | 250 | **41** | 26 | 30 |
| Barium | ppm | ASTM D5185(m) | 10 | **0** | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 100 | **39** | 41 | 39 |
| Manganese | ppm | ASTM D5185(m) | | **0** | <1 | 1 |
| Magnesium | ppm | ASTM D5185(m) | 450 | **496** | 518 | 477 |
| Calcium | ppm | ASTM D5185(m) | 3000 | **1687** | 1696 | 1673 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | **728** | 788 | 758 |
| Zinc | ppm | ASTM D5185(m) | 1350 | **870** | 883 | 820 |
| Sulfur | ppm | ASTM D5185(m) | 4250 | **2017** | 2075 | 2242 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | **20.6** | 21.7 | 21.2 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.4 | **13.6** | 13.0 | 12.3 |

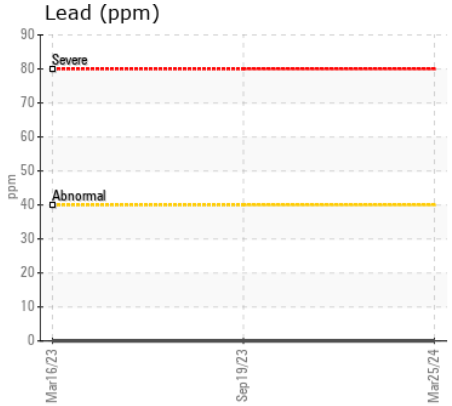
Viscosity @ 100°C



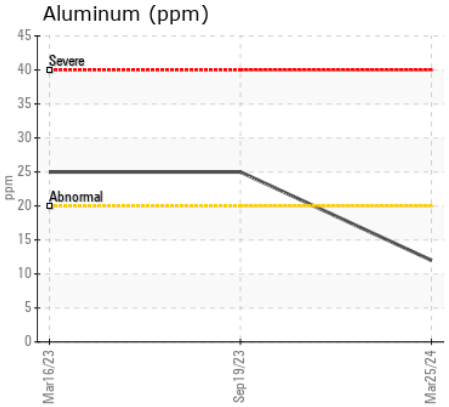

Iron (ppm)



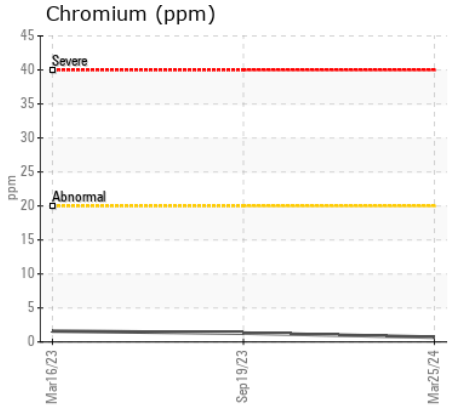

Lead (ppm)



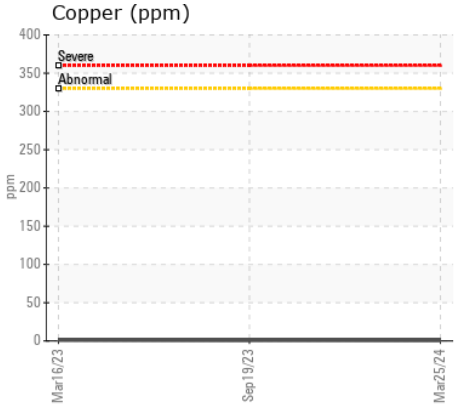

Aluminum (ppm)



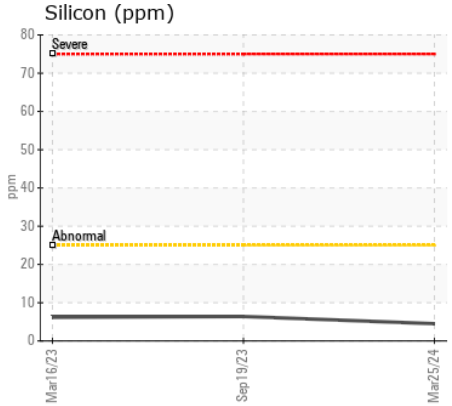

Chromium (ppm)



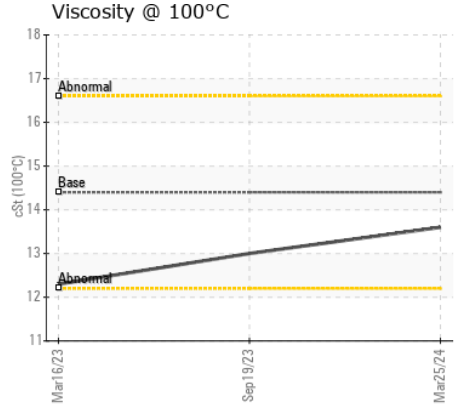

Copper (ppm)



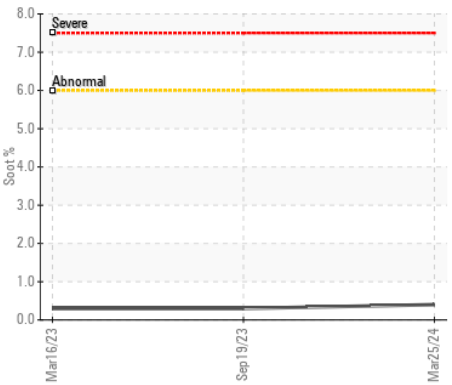

Silicon (ppm)




Viscosity @ 100°C




Soot %




ISO 17025:2017 Accredited Laboratory

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|---|---|---|---|
| **Laboratory** | : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 | | |
| **Sample No.** | : WC0895517 | **Received** | : 28 Mar 2024 |
| **Lab Number** | : 02625129 | **Tested** | : 28 Mar 2024 |
| **Unique Number** | : 5750248 | **Diagnosed** | : 28 Mar 2024 - Wes Davis |
| **Test Package** | : MOB 1 | | |

*To discuss this sample report, contact Customer Service at 1-800-268-2131.*
*Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.*
*Validity of results and interpretation are based on the sample and information as supplied.*

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