



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



Machine Id
WL0404
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Nous vous recommandons de vérifier la source de la fuite de fluide de refroidissement. Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. Nous vous recommandons de rincer complètement le composant avant de le remplir l'huile. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0067512 | GFL0071854 | GFL0067498 |
| Sample Date | | Client Info | | 17 Feb 2024 | 01 Aug 2023 | 19 May 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 1412 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | NORMAL | NORMAL |

WEAR

Les taux d'usure de tous les composants sont normaux.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >100 | 8 | 10 | 15 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >2 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | 4 | 7 | 11 |
| 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 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

Le test de glycol est positif. Concentration modérée de glycol dans l'huile. Concentration modérée d'eau dans l'huile.

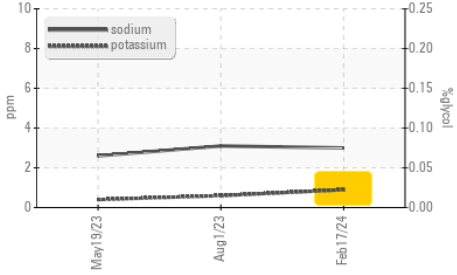
| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | 4 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | % | ASTM D6304* | >0.2 | NEG | NEG | NEG |
| Glycol | % | ASTM D7922* | | ▲ 0.045 | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0 | 0 | 0.1 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 5.6 | 5.9 | 7.1 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 20.5 | 22.7 | 23.7 |
| Emulsified Water | scalar | Visual* | >0.2 | ▲ .5% | NEG | NEG |

FLUID CONDITION

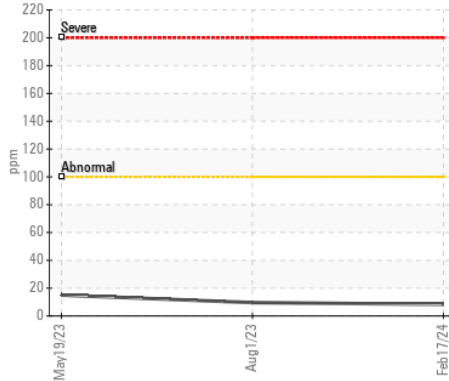
l'huile ne peut plus être utilisée en raison de la présence de contaminants.

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 3 | 3 | 3 |
| Boron | ppm | ASTM D5185(m) | 250 | 36 | 37 | 26 |
| Barium | ppm | ASTM D5185(m) | 10 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 100 | 44 | 38 | 38 |
| Manganese | ppm | ASTM D5185(m) | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 450 | 617 | 493 | 486 |
| Calcium | ppm | ASTM D5185(m) | 3000 | 1429 | 1641 | 1614 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 912 | 972 | 923 |
| Zinc | ppm | ASTM D5185(m) | 1350 | 1037 | 1053 | 1033 |
| Sulfur | ppm | ASTM D5185(m) | 4250 | 2629 | 2493 | 2374 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 17.6 | 20.0 | 20.5 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 10.9 | 10.8 | 10.7 | 10.7 |

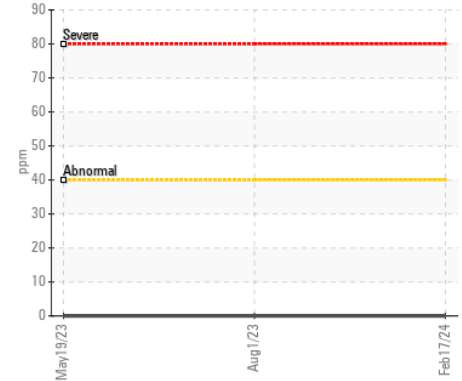
▲ Glycol Contamination



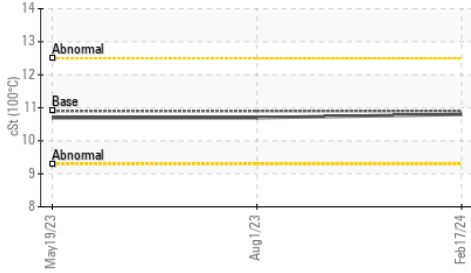
Iron (ppm)



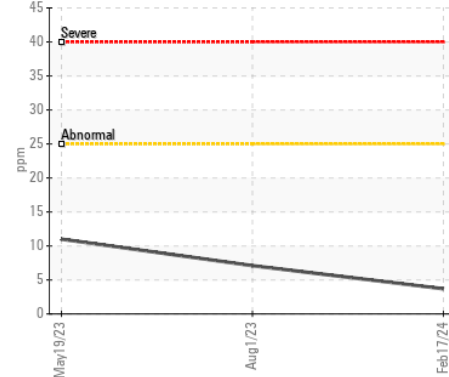
Lead (ppm)



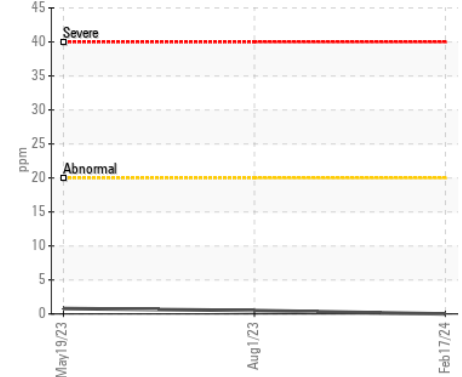
Viscosity @ 100°C



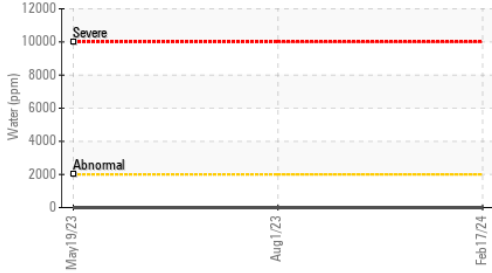
Aluminum (ppm)



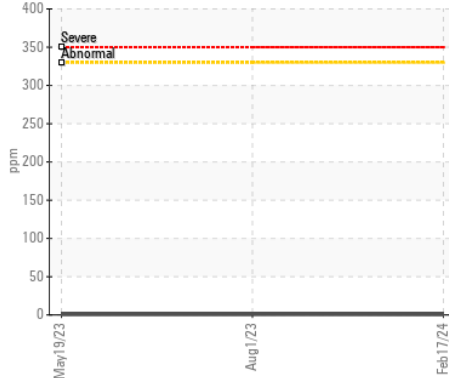
Chromium (ppm)



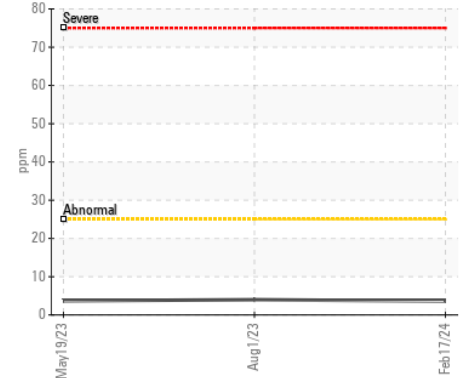
Water (KF)



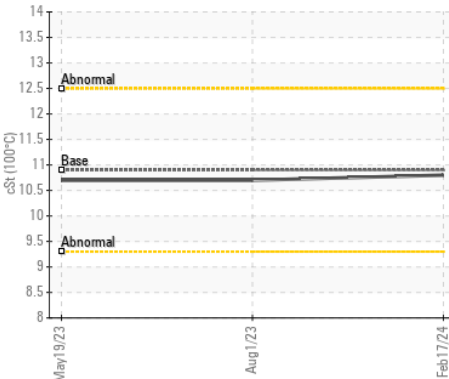
Copper (ppm)



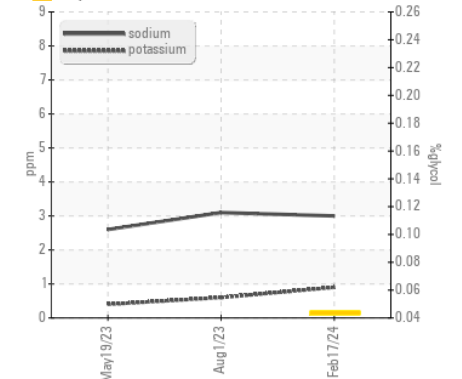
Silicon (ppm)



Viscosity @ 100°C



▲ Glycol Contamination



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 743 - Montreal Est CD Processing
Sample No. : GFL0067512 **Received** : 28 Feb 2024 10930 rue Sherbrooke
Lab Number : 02618633 **Tested** : 29 Feb 2024 Montreal, QC
Unique Number : 5735743 **Diagnosed** : 01 Mar 2024 - Kevin Marson CA H1B 1B4
Test Package : MOB 1 (Additional Tests: Glycol, KF) Contact: Patrick Beaulieu
 patrick.beaulieu@gflenv.com

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.