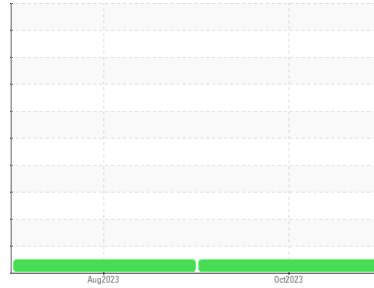




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
713071

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Veuillez préciser la marque et le modèle du composant lors du prochain échantillon.

Wear

Les taux de métaux sont typiques pour la période de rodage d'un nouveau composant.

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. Il n'y a aucun indice de contamination dans l'huile.

Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|-------------|----------|
| Sample Number | Client Info | GFL0084396 | GFL | --- |
| Sample Date | Client Info | 02 Oct 2023 | 10 Aug 2023 | --- |
| Machine Age | kms Client Info | 9953 | 0 | --- |
| Oil Age | kms Client Info | 0 | 0 | --- |
| Oil Changed | Client Info | Changed | N/A | --- |
| Sample Status | | NORMAL | NORMAL | --- |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|--------------|----------------|----------|----------|
| Fuel | WC Method >5 | <1.0 | 0.4 | --- |
| Glycol | WC Method | NEG | NEG | --- |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|-----------|------------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185(m) >100 | 20 | 55 | --- |
| Chromium | ppm ASTM D5185(m) >20 | <1 | 2 | --- |
| Nickel | ppm ASTM D5185(m) >4 | 0 | 1 | --- |
| Titanium | ppm ASTM D5185(m) | 0 | <1 | --- |
| Silver | ppm ASTM D5185(m) >3 | 1 | 1 | --- |
| Aluminum | ppm ASTM D5185(m) >20 | 5 | 8 | --- |
| Lead | ppm ASTM D5185(m) >40 | 5 | 4 | --- |
| Copper | ppm ASTM D5185(m) >330 | 193 | 187 | --- |
| Tin | ppm ASTM D5185(m) >15 | 1 | 5 | --- |
| Antimony | ppm ASTM D5185(m) | 0 | 0 | --- |
| Vanadium | ppm ASTM D5185(m) | 0 | 0 | --- |
| Beryllium | ppm ASTM D5185(m) | 0 | 0 | --- |
| Cadmium | ppm ASTM D5185(m) | 0 | 0 | --- |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|------------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185(m) 250 | 7 | 49 | --- |
| Barium | ppm ASTM D5185(m) 10 | <1 | <1 | --- |
| Molybdenum | ppm ASTM D5185(m) 100 | 59 | 47 | --- |
| Manganese | ppm ASTM D5185(m) | <1 | 5 | --- |
| Magnesium | ppm ASTM D5185(m) 450 | 917 | 551 | --- |
| Calcium | ppm ASTM D5185(m) 3000 | 1193 | 1917 | --- |
| Phosphorus | ppm ASTM D5185(m) 1150 | 956 | 771 | --- |
| Zinc | ppm ASTM D5185(m) 1350 | 1174 | 926 | --- |
| Sulfur | ppm ASTM D5185(m) 4250 | 2220 | 1770 | --- |
| Lithium | ppm ASTM D5185(m) | <1 | <1 | --- |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|-----------|----------|----------|
| Silicon | ppm ASTM D5185(m) >25 | 3 | 8 | --- |
| Sodium | ppm ASTM D5185(m) | 2 | 5 | --- |
| Potassium | ppm ASTM D5185(m) >20 | 12 | 18 | --- |

INFRA-RED

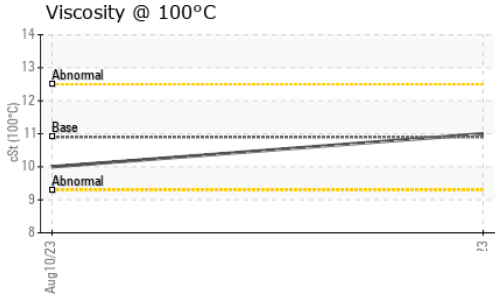
| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot % | % ASTM D7844* >3 | 0.2 | 0.3 | --- |
| Nitration | Abs/cm ASTM D7624* >20 | 7.0 | 8.0 | --- |
| Sulfation | Abs/.1mm ASTM D7415* >30 | 20.4 | 22.9 | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Oxidation | Abs/.1mm ASTM D7414* >25 | 15.9 | 19.9 | --- |



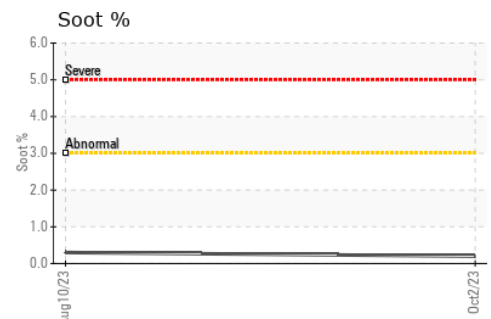
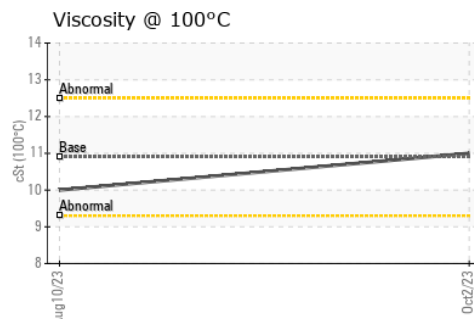
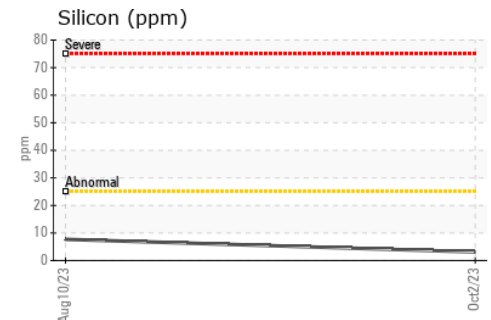
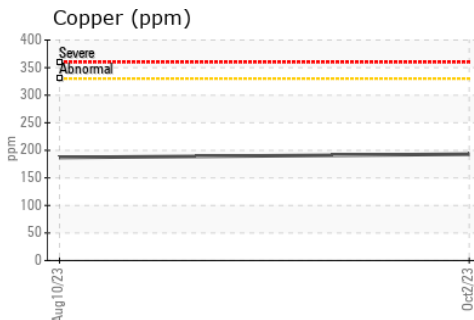
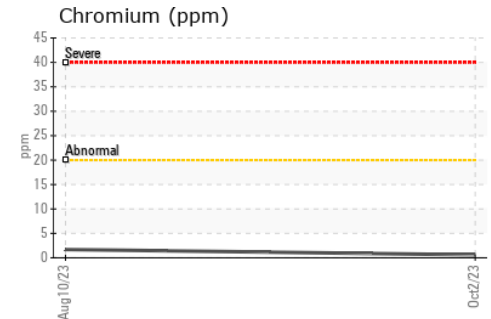
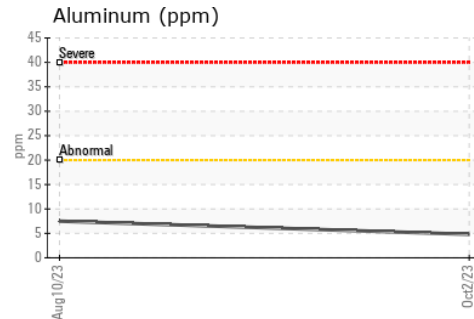
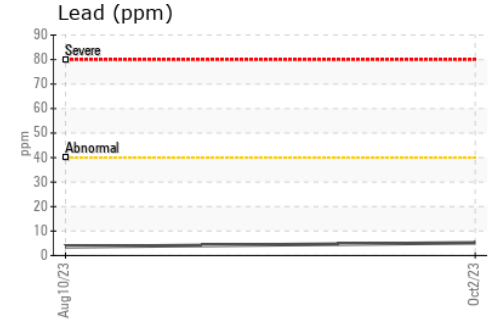
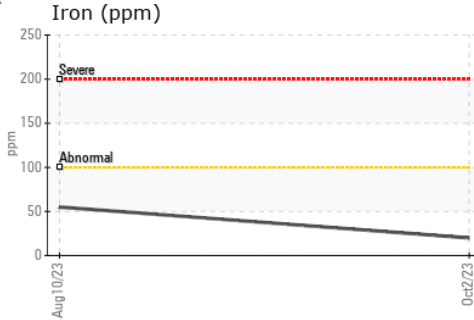
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 100°C | cSt | ASTM D7279(m) | 10.9 | 11.0 | 10.0 |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0084396 **Received** : 12 Oct 2023 4365 boul. St-Elzear Ouest, Laval, QC
Lab Number : 02588563 **Diagnosed** : 12 Oct 2023 CA H7P 4J3
Unique Number : 5657629 **Diagnostician** : Wes Davis Contact: Louis Michaud
Test Package : MOB 1 louis.michaud@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.