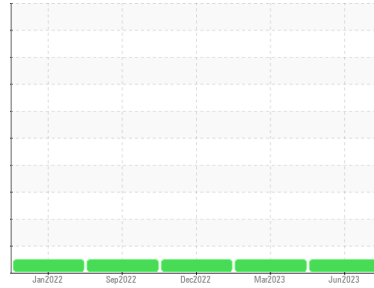




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
711033
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Wear

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

Contamination

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 | | GFL0084477 | GFL0073423 | GFL0062071 |
| Sample Date | Client Info | | 22 Jun 2023 | 17 Mar 2023 | 22 Dec 2022 |
| Machine Age | hrs | Client Info | 0 | 3696 | 3279 |
| Oil Age | hrs | Client Info | 600 | 600 | 500 |
| Oil Changed | Client Info | | Changed | N/A | N/A |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Glycol | WC Method | | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|--------------|----------|----|
| Iron | ppm | ASTM D5185(m) | >120 | 8 | 8 | 11 |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >5 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185(m) | >2 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 2 | 3 | 3 |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >330 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185(m) | >15 | <1 | <1 | <1 |
| Antimony | ppm | ASTM D5185(m) | | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 | |
|------------|--------|---------------|---------|--------------|----------|------|
| Boron | ppm | ASTM D5185(m) | 2 | 4 | 2 | 2 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 50 | 59 | 56 | 60 |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 950 | 972 | 911 | 974 |
| Calcium | ppm | ASTM D5185(m) | 1050 | 1051 | 1102 | 1112 |
| Phosphorus | ppm | ASTM D5185(m) | 995 | 1012 | 1013 | 1031 |
| Zinc | ppm | ASTM D5185(m) | 1180 | 1171 | 1175 | 1187 |
| Sulfur | ppm | ASTM D5185(m) | 2600 | 2349 | 2516 | 2393 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|----------|----------|---|
| Silicon | ppm | ASTM D5185(m) | >25 | 3 | 3 | 4 |
| Sodium | ppm | ASTM D5185(m) | | 3 | 3 | 8 |
| Potassium | ppm | ASTM D5185(m) | >20 | 4 | 4 | 7 |

INFRA-RED

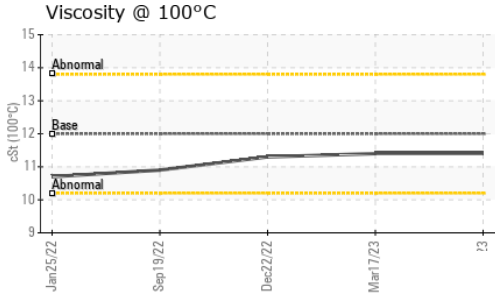
| | method | limit/base | current | history1 | history2 | |
|-----------|----------|-------------|---------|-------------|----------|------|
| Soot % | % | ASTM D7844* | >4 | 0.2 | 0.1 | 0.2 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 7.9 | 7.9 | 8.9 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.6 | 21.8 | 21.1 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 | |
|-----------|----------|-------------|---------|-------------|----------|------|
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 15.5 | 15.3 | 16.2 |



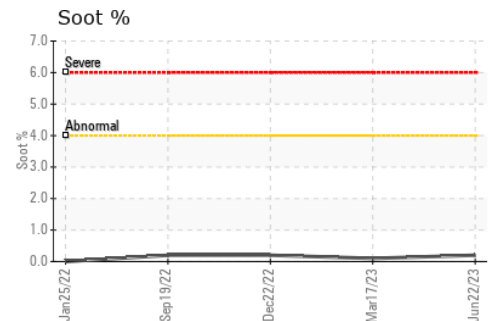
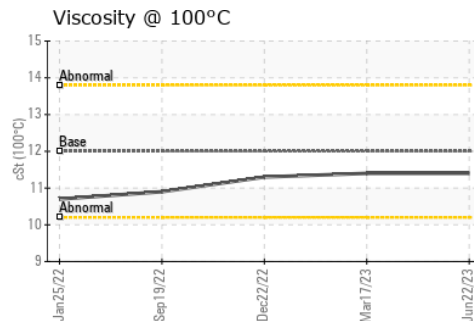
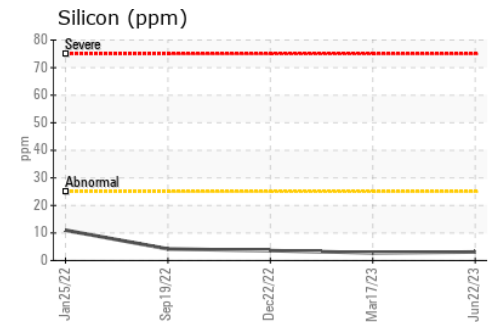
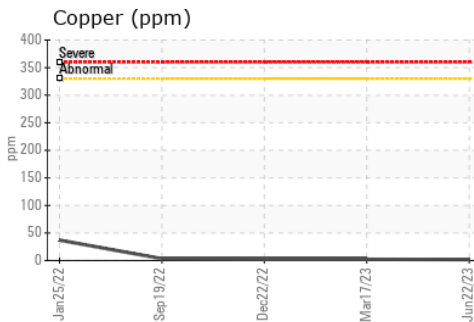
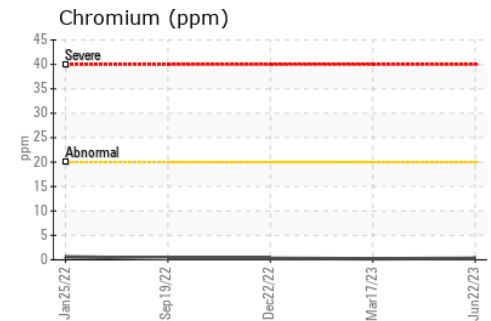
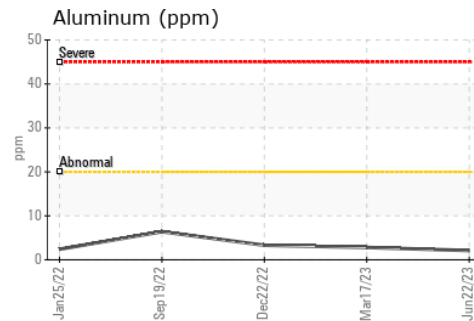
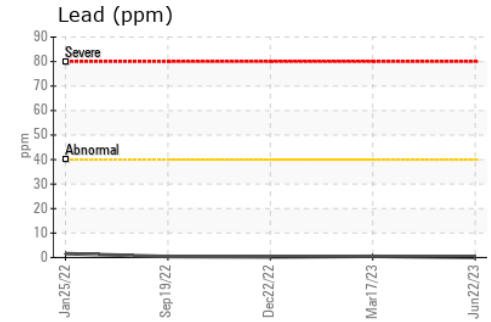
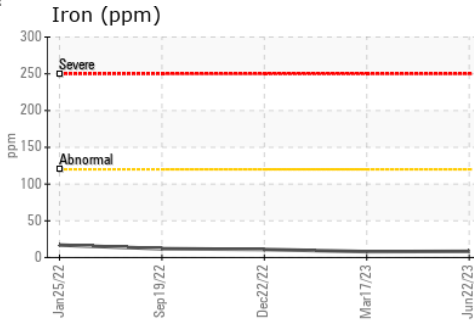
OIL ANALYSIS REPORT



| 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) | 12.00 | 11.4 | 11.3 |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0084477 **Received** : 10 Jul 2023
Lab Number : 02568707 **Diagnosed** : 10 Jul 2023
Unique Number : 5605753 **Diagnostician** : 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.

4365 boul. St-Elzear Ouest,
 Laval, QC
 CA H7P 4J3
 Contact: Pieces Laval
 pieces.laval@gflenv.com
 T: (450)687-3838
 F: