



OIL ANALYSIS REPORT

Sample Rating Trend

FUEL

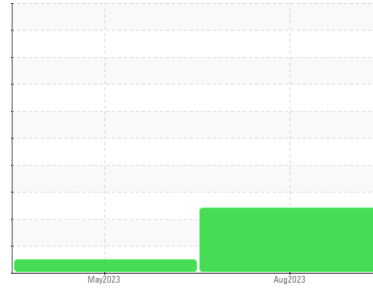


Area
{UNASSIGNED}

Machine Id
420121

Component
1 Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (40 LTR)



DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier le système d'injection de carburant. Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

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

Contamination

Quantité élevée de carburant dans l'huile. Les tests confirment la présence de carburant dans l'huile.

Fluid Condition

Il y a du carburant dans l'huile, ce qui réduit la viscosité. L'huile ne peut plus être utilisée en raison de la présence de contaminants.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info | | GFL0076608 | GFL0076624 | --- |
| Sample Date | Client Info | | 14 Aug 2023 | 25 May 2023 | --- |
| Machine Age | hrs | Client Info | 6009 | 5707 | --- |
| Oil Age | hrs | Client Info | 600 | 600 | --- |
| Oil Changed | Client Info | | Changed | Changed | --- |
| Sample Status | | | SEVERE | NORMAL | --- |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|------------|----------|----------|
| Glycol | WC Method | | NEG | NEG | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >120 | 9 | 12 | --- |
| Chromium | ppm | ASTM D5185(m) >20 | <1 | <1 | --- |
| Nickel | ppm | ASTM D5185(m) >5 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185(m) >2 | 0 | <1 | --- |
| Silver | ppm | ASTM D5185(m) >2 | <1 | 0 | --- |
| Aluminum | ppm | ASTM D5185(m) >20 | 1 | 2 | --- |
| Lead | ppm | ASTM D5185(m) >40 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185(m) >330 | 4 | 4 | --- |
| Tin | ppm | ASTM D5185(m) >15 | <1 | <1 | --- |
| 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) 2 | 3 | 3 | --- |
| Barium | ppm | ASTM D5185(m) 0 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185(m) 50 | 54 | 58 | --- |
| Manganese | ppm | ASTM D5185(m) 0 | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185(m) 950 | 919 | 941 | --- |
| Calcium | ppm | ASTM D5185(m) 1050 | 993 | 1155 | --- |
| Phosphorus | ppm | ASTM D5185(m) 995 | 995 | 1052 | --- |
| Zinc | ppm | ASTM D5185(m) 1180 | 1128 | 1184 | --- |
| Sulfur | ppm | ASTM D5185(m) 2600 | 2419 | 2443 | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >25 | 6 | 5 | --- |
| Sodium | ppm | ASTM D5185(m) | 4 | 3 | --- |
| Potassium | ppm | ASTM D5185(m) >20 | 2 | 2 | --- |
| Fuel | % | ASTM D7593* >3.0 | 5.9 | <1.0 | --- |

INFRA-RED

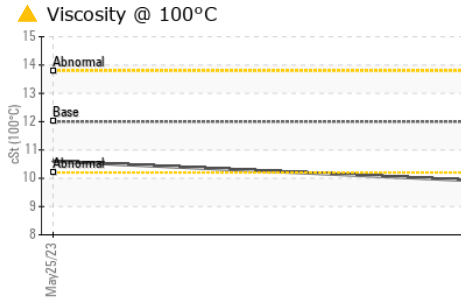
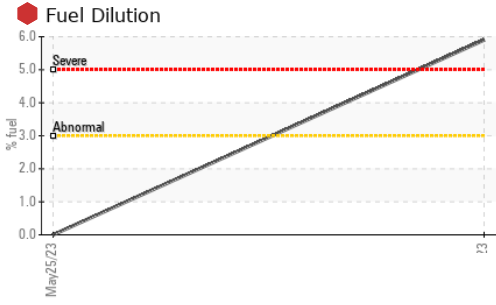
| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* >4 | 0 | 0.1 | --- |
| Nitration | Abs/cm | ASTM D7624* >20 | 6.5 | 8.8 | --- |
| Sulfation | Abs/.1mm | ASTM D7415* >30 | 18.2 | 19.5 | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | ASTM D7414* >25 | 12.7 | 16.0 | --- |



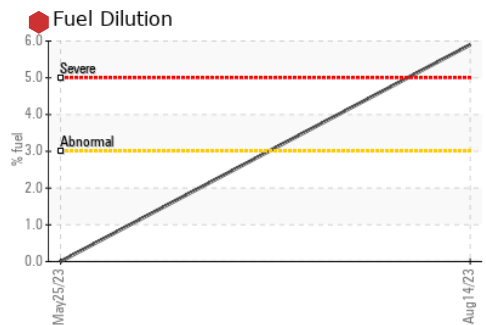
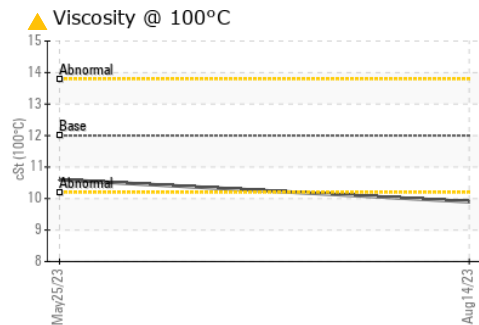
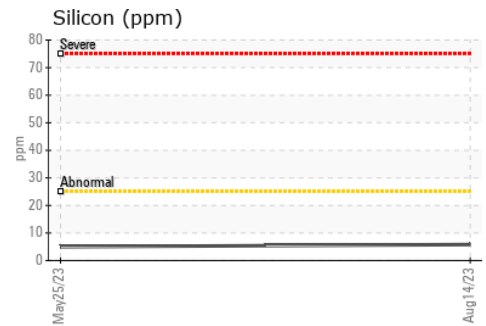
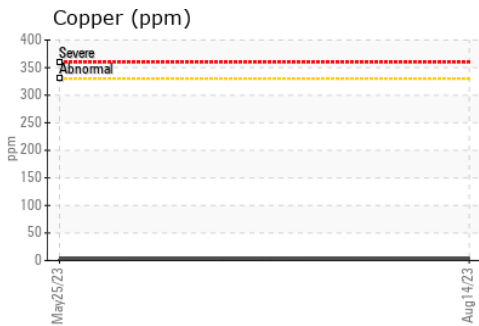
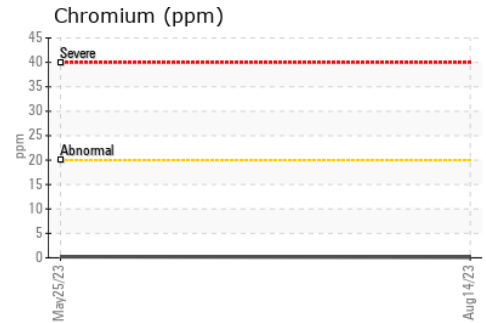
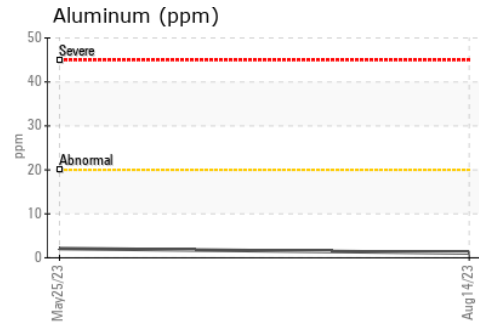
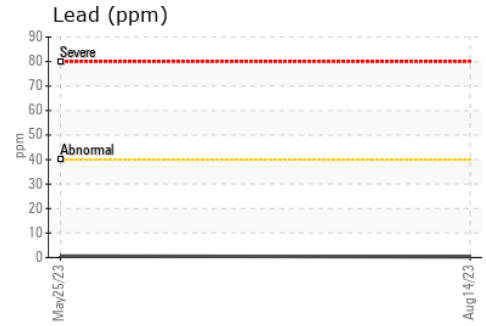
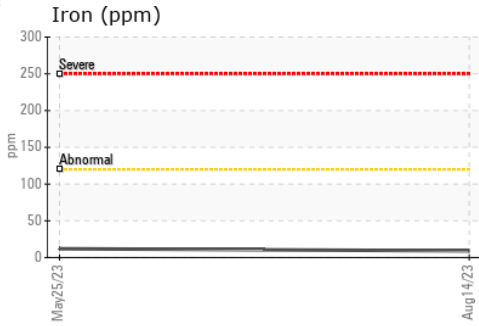
OIL ANALYSIS REPORT



| 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) | ▲ 9.9 | 10.6 | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 731STOK - Stoke Hauling
Sample No. : GFL0076608 **Received** : 18 Aug 2023 286 Chemin Cote
Lab Number : 02576661 **Diagnosed** : 21 Aug 2023 Stoke, QC
Unique Number : 5629721 **Diagnostician** : Wes Davis CA J0B 3G0
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) Contact: Robert Sayers
rsayers@matrec.ca

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.