



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

Machine Id
110008

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0110710 | GFL0094530 | GFL0088998 |
| Sample Date | | Client Info | | 18 Jan 2024 | 08 Nov 2023 | 03 Sep 2023 |
| Machine Age | hrs | Client Info | | 11710 | 11095 | 10549 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | N/A | N/A |
| Filter Changed | | Client Info | | Changed | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >65 | 6 | 5 | 5 |
| Chromium | ppm | ASTM D5185(m) | >5 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >3 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >35 | 2 | 2 | 2 |
| Lead | ppm | ASTM D5185(m) | >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >180 | <1 | 1 | 1 |
| Tin | ppm | ASTM D5185(m) | >8 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

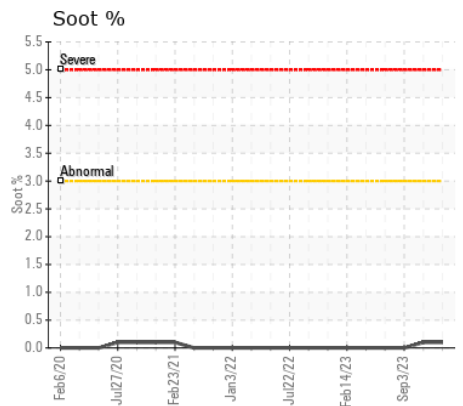
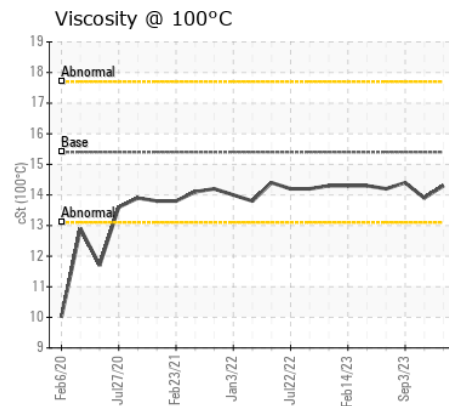
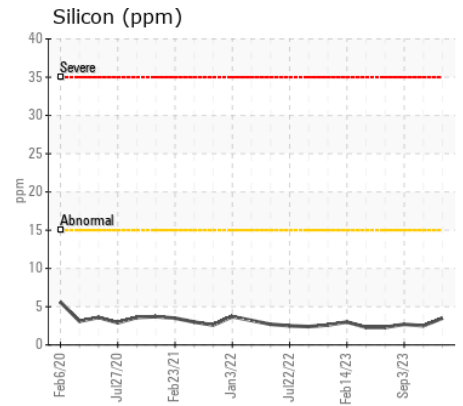
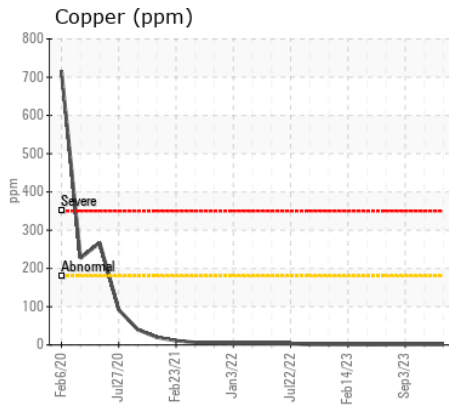
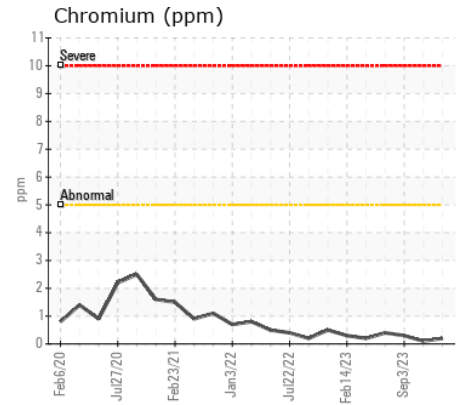
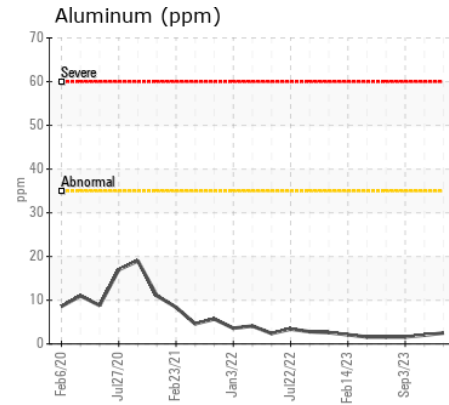
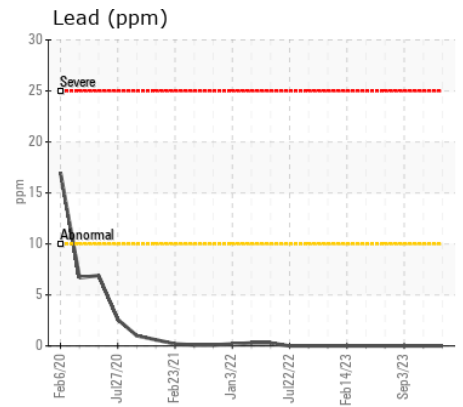
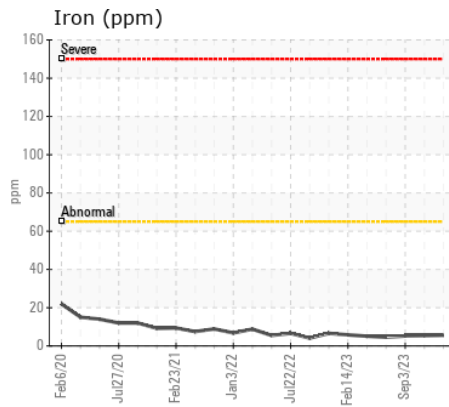
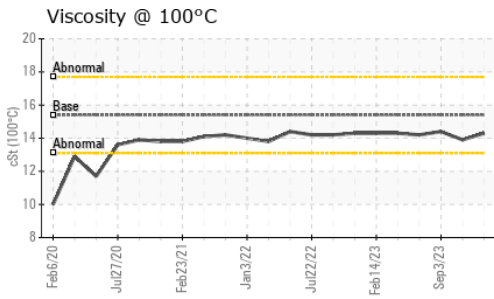
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >15 | 4 | 2 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | 2 |
| 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* | >3 | 0.1 | 0.1 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 6.5 | 6.8 | 7.1 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 18.3 | 18.4 | 19.7 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 1 | 2 | 2 |
| Boron | ppm | ASTM D5185(m) | 0 | 2 | 2 | 3 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 57 | 55 | 58 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 955 | 941 | 969 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1080 | 1051 | 1029 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 1009 | 956 | 1037 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1182 | 1202 | 1186 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2716 | 2478 | 2517 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 14.4 | 14.7 | 14.6 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 14.3 | 13.9 | 14.4 |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 207 - Pickering SW**
Sample No. : GFL0110710 **Received** : 23 Jan 2024 **1034 TOY AVENUE, PICKERING YARD**
Lab Number : 02610507 **Diagnosed** : 23 Jan 2024 **PICKERING, ON**
Unique Number : 5711593 **Diagnostician** : Wes Davis **CA L1W 3P1**
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.

Contact: Ian Patton
ipatton@gflenv.com
T: (905)831-6297
F: (905)426-3577