



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



Machine Id
401150
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0086798 | GFL0094399 | GFL0086764 |
| Sample Date | | Client Info | | 04 Jan 2024 | 13 Oct 2023 | 15 Aug 2023 |
| Machine Age | hrs | Client Info | | 12145 | 8629 | 8629 |
| Oil Age | hrs | Client Info | | 600 | 8629 | 8629 |
| Filter Age | hrs | Client Info | | 600 | 8629 | 8629 |
| 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) | >120 | 7 | 9 | 15 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185(m) | >15 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 2 | 2 | 2 |
| Lead | ppm | ASTM D5185(m) | >40 | <1 | 2 | 4 |
| Copper | ppm | ASTM D5185(m) | >330 | 2 | 2 | 5 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

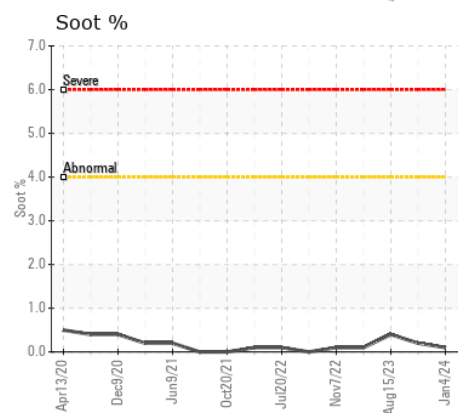
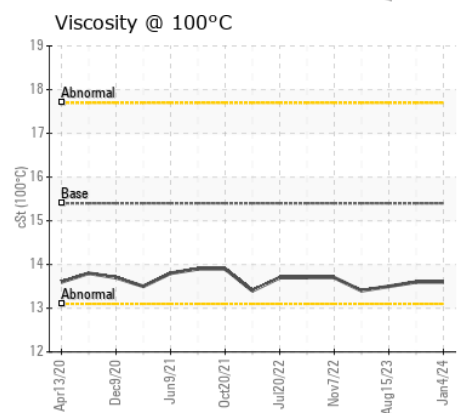
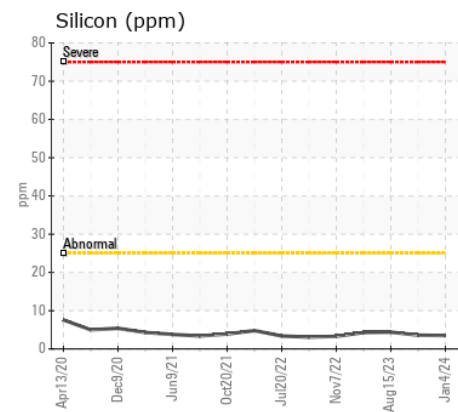
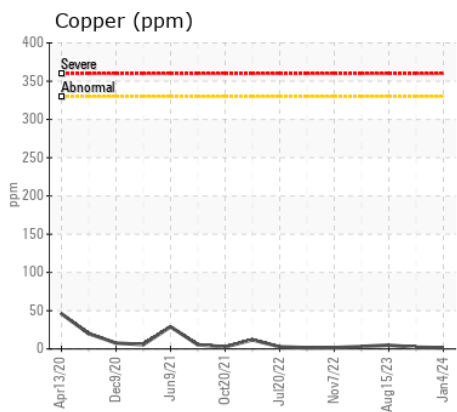
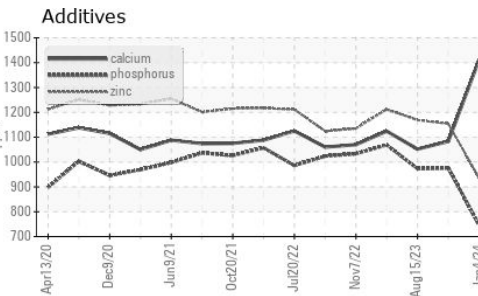
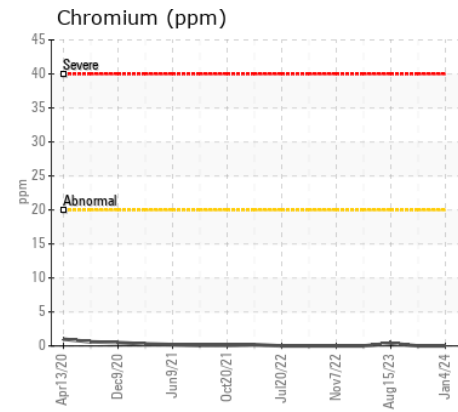
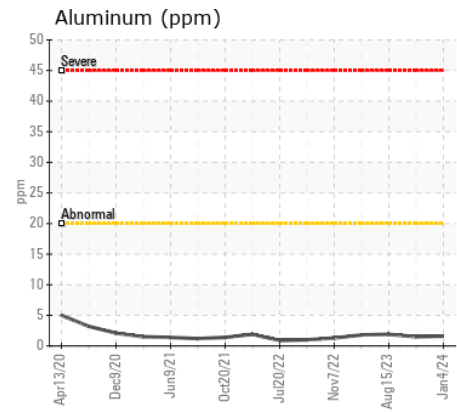
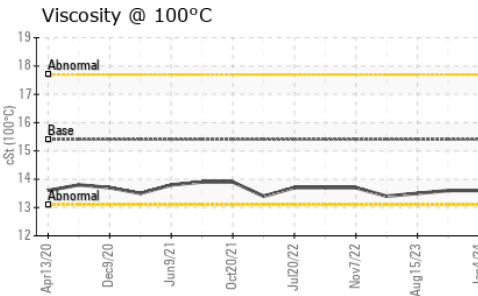
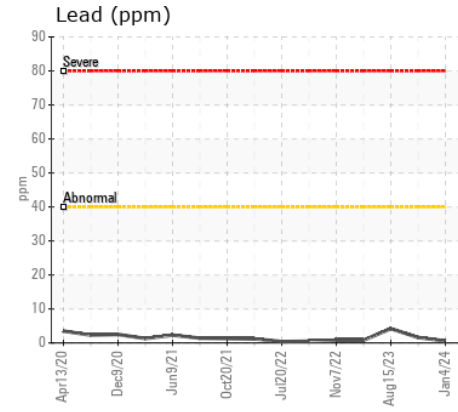
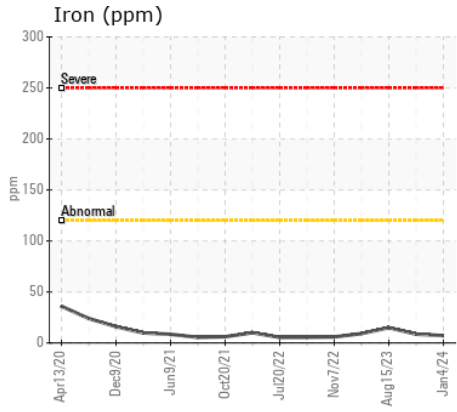
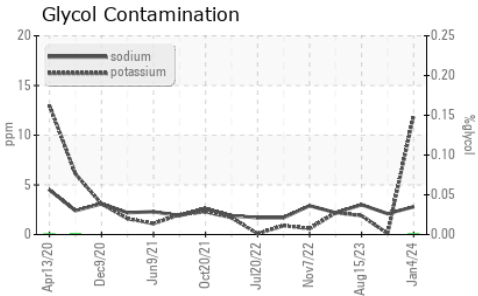
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | 4 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | 12 | <1 | 2 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | % | ASTM D7922* | | 0.0 | NEG | NEG |
| Soot % | % | ASTM D7844* | >4 | 0.1 | 0.2 | 0.4 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 8.6 | 7.9 | 10.1 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.1 | 19.7 | 22.6 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | 3 | 2 | 3 |
| Boron | ppm | ASTM D5185(m) | 0 | 19 | 7 | 2 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 53 | 61 | 59 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 626 | 945 | 970 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1411 | 1083 | 1052 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 746 | 976 | 973 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 936 | 1154 | 1169 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2211 | 2386 | 2236 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 15.0 | 14.9 | 17.8 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 13.6 | 13.6 | 13.5 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0086798 **Received** : 05 Jan 2024
Lab Number : 02606685 **Diagnosed** : 08 Jan 2024
Unique Number : 5707771 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)
 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.

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