MOB I LUBE 360™ OIL DIAGNOSTICS

# OIL ANALYSIS REPORT

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

Machine Id
**411008**
Component
**Diesel Engine**
Fluid
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

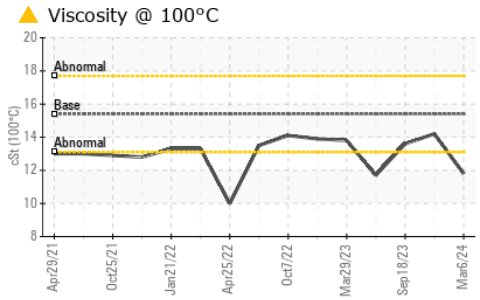
## CONTAMINATION

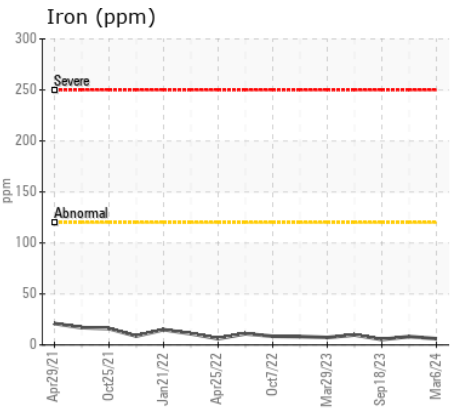
Fuel content negligible. There is no indication of any contamination in the oil.

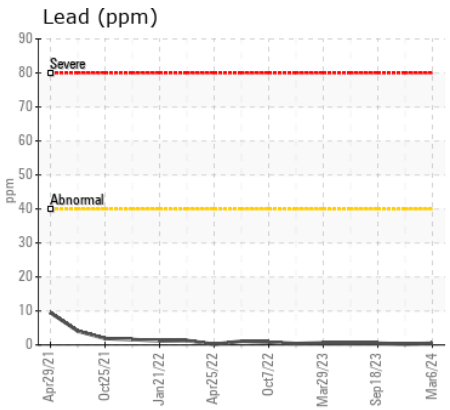
## FLUID CONDITION

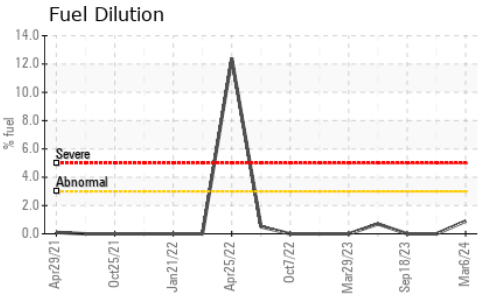
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

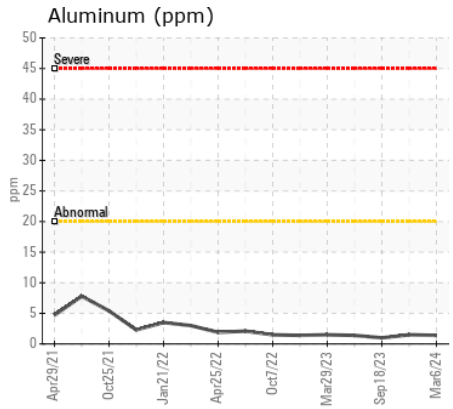
| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **GFL0102906** | GFL0097336 | GFL0090860 |
| Sample Date | | Client Info | | **06 Mar 2024** | 21 Dec 2023 | 18 Sep 2023 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **7461** | 7059 | 0 |
| Filter Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Filter Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **ABNORMAL** | NORMAL | NORMAL |
| Iron | ppm | ASTM D5185(m) | >120 | **6** | 8 | 5 |
| Chromium | ppm | ASTM D5185(m) | >20 | **0** | 0 | <1 |
| Nickel | ppm | ASTM D5185(m) | >5 | **<1** | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >2 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | **1** | 2 | 1 |
| Lead | ppm | ASTM D5185(m) | >40 | **<1** | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >330 | **<1** | 1 | <1 |
| Tin | ppm | ASTM D5185(m) | >15 | **<1** | <1 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silicon | ppm | ASTM D5185(m) | >25 | **4** | 3 | 2 |
| Potassium | ppm | ASTM D5185(m) | >20 | **2** | 6 | <1 |
| Fuel | % | ASTM D7593* | >3.0 | **0.9** | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | **NEG** | NEG | NEG |
| Glycol | | WC Method | | **NEG** | 0.0 | NEG |
| Soot % | % | ASTM D7844* | >4 | **0.1** | 0.2 | 0.1 |
| Nitration | Abs/cm | ASTM D7624* | >20 | **8.4** | 9.5 | 7.2 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | **22.8** | 23.7 | 18.8 |
| Emulsified Water | scalar | Visual* | >0.2 | **NEG** | NEG | NEG |
| Sodium | ppm | ASTM D5185(m) | | **2** | 2 | 1 |
| Boron | ppm | ASTM D5185(m) | 0 | **42** | 55 | 4 |
| Barium | ppm | ASTM D5185(m) | 0 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | **41** | 18 | 57 |
| Manganese | ppm | ASTM D5185(m) | 0 | **0** | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | **452** | 194 | 916 |
| Calcium | ppm | ASTM D5185(m) | 1070 | **1751** | 2033 | 1072 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | **762** | 995 | 1027 |
| Zinc | ppm | ASTM D5185(m) | 1270 | **887** | 1162 | 1121 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | **2317** | 2991 | 2430 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | **20.7** | 18.8 | 14.4 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | ▲ **11.8** | 14.2 | 13.6 |

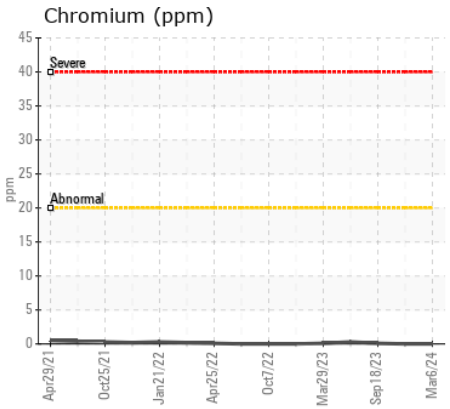


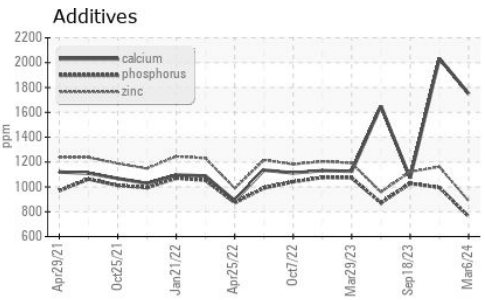



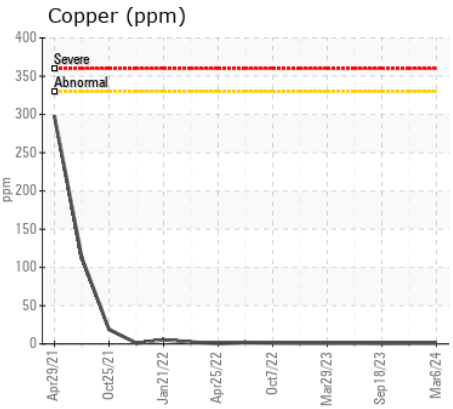



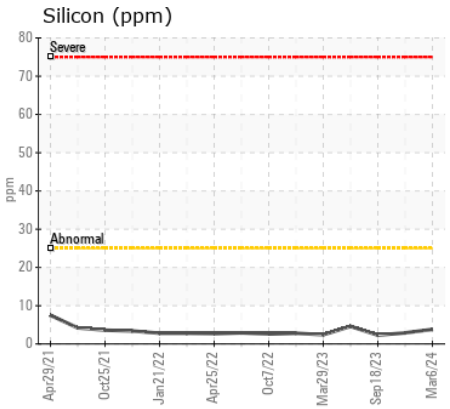



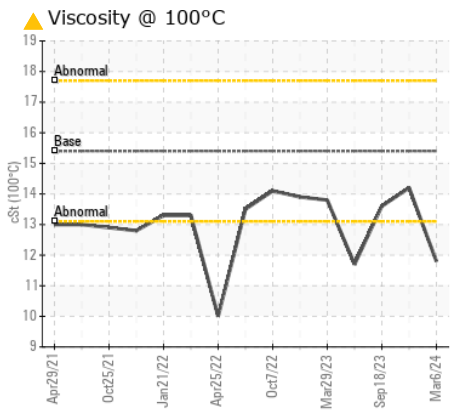



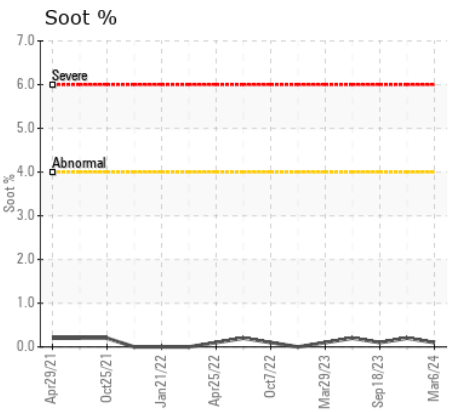




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : GFL0102906
**Lab Number** : 02620398
**Unique Number** : 5737508
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**Received** : 07 Mar 2024
**Tested** : 08 Mar 2024
**Diagnosed** : 08 Mar 2024 - Kevin Marson

*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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