



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
101096

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | GFL0107883 | --- | --- |
| Sample Date | Client Info | | 29 Jan 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | Changed | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel | WC Method | >5 | <1.0 | --- | --- |
| Water | WC Method | >0.2 | NEG | --- | --- |
| Glycol | WC Method | | NEG | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >100 | 9 | --- | --- |
| Chromium | ppm | ASTM D5185(m) >20 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185(m) >4 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) >3 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) >20 | 1 | --- | --- |
| Lead | ppm | ASTM D5185(m) >40 | <1 | --- | --- |
| Copper | ppm | ASTM D5185(m) >330 | <1 | --- | --- |
| Tin | ppm | ASTM D5185(m) >15 | 0 | --- | --- |
| Antimony | ppm | ASTM D5185(m) | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | 0 | --- | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) 2 | 12 | --- | --- |
| Barium | ppm | ASTM D5185(m) 0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) 50 | 61 | --- | --- |
| Manganese | ppm | ASTM D5185(m) 0 | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) 950 | 968 | --- | --- |
| Calcium | ppm | ASTM D5185(m) 1050 | 1137 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) 995 | 1045 | --- | --- |
| Zinc | ppm | ASTM D5185(m) 1180 | 1201 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) 2600 | 2812 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | --- | --- |

CONTAMINANTS

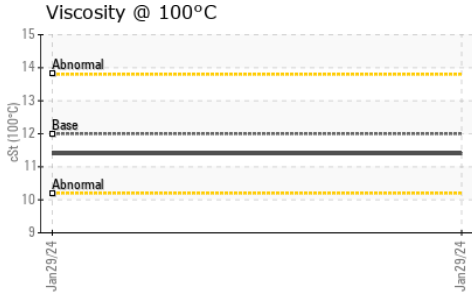
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >25 | 4 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | 1 | --- | --- |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | --- | --- |

INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* >3 | 0.1 | --- | --- |
| Nitration | Abs/cm | ASTM D7624* >20 | 6.6 | --- | --- |
| Sulfation | Abs./1mm | ASTM D7415* >30 | 19.3 | --- | --- |



OIL ANALYSIS REPORT



FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|-----------|----------------------|-------------|----------|----------|
| Oxidation | Abs./1mm ASTM D7414* | 14.6 | --- | --- |

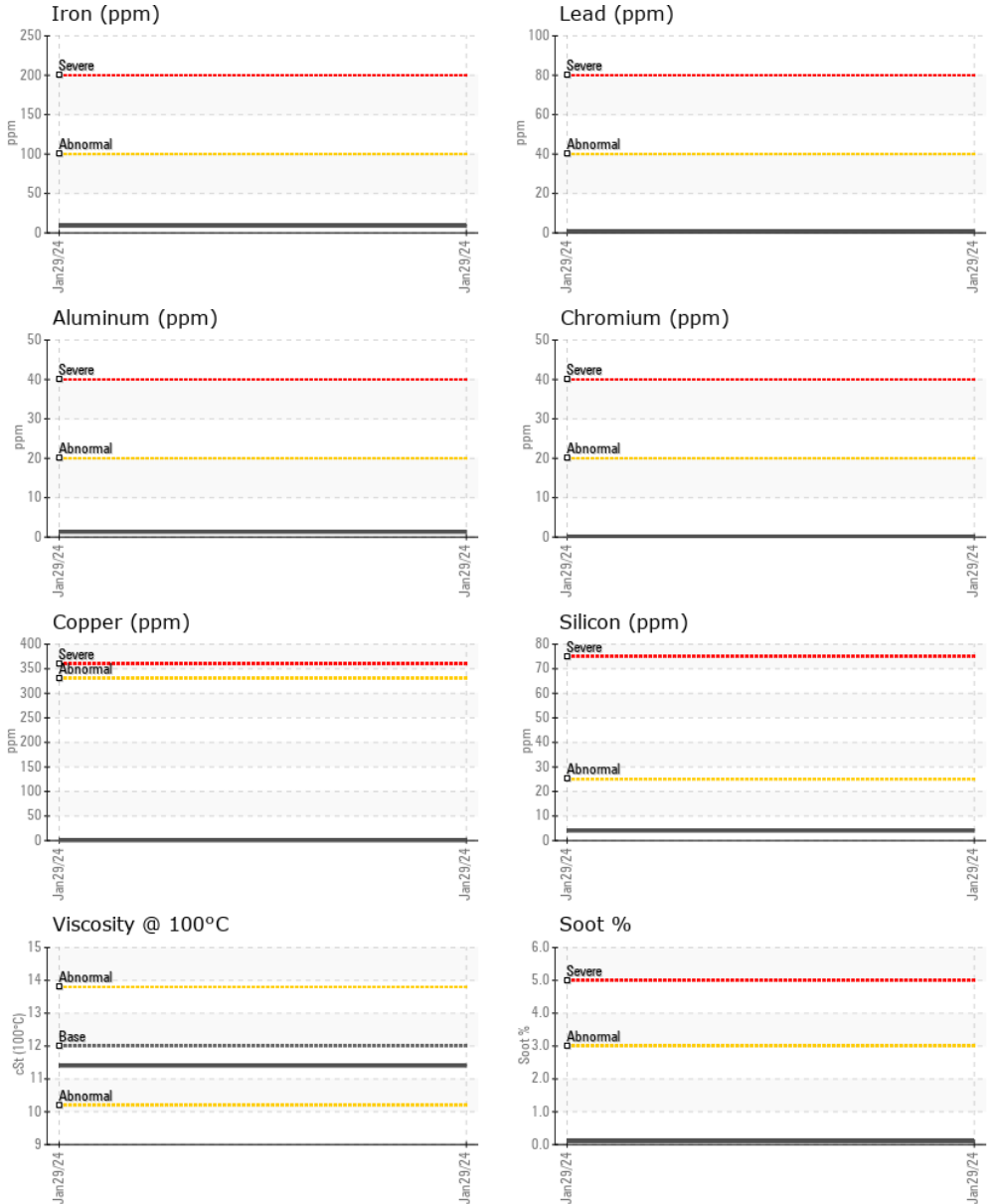
VISUAL

| method | limit/base | current | history1 | history2 |
|------------------|----------------|------------|----------|----------|
| Emulsified Water | scalar Visual* | NEG | --- | --- |
| Free Water | scalar Visual* | NEG | --- | --- |

FLUID PROPERTIES

| method | limit/base | current | history1 | history2 |
|--------------|-------------------|-------------|----------|----------|
| Visc @ 100°C | cSt ASTM D7279(m) | 11.4 | --- | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 310 - Winnipeg**
Sample No. : GFL0107883 **Received** : 12 Feb 2024 **#360 - 555 Hervo Street,**
Lab Number : 02614899 **Tested** : 12 Feb 2024 **Winnipeg, MB**
Unique Number : 5723994 **Diagnosed** : 12 Feb 2024 - Wes Davis **CA R3T 3L6**
Test Package : MOB 1 **Contact:** Joshua Lourenco
jlourenco@gflenv.com

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.