



OIL ANALYSIS REPORT

Sample Rating Trend

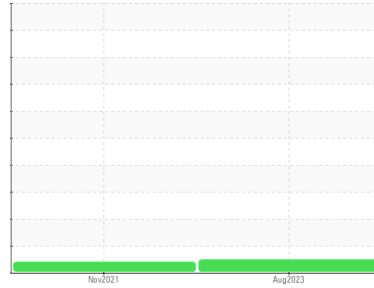
NORMAL



Machine Id
OR1022

Component
Front Differential

Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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 | | GFL0087364 | GFL0030484 | --- |
| Sample Date | Client Info | | 02 Aug 2023 | 18 Nov 2021 | --- |
| Machine Age | hrs | Client Info | 14483 | 13151 | --- |
| Oil Age | hrs | Client Info | 1882 | 2000 | --- |
| Oil Changed | | Client Info | Not Changed | Changed | --- |
| Sample Status | | | NORMAL | ABNORMAL | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|--------------|----------|-----|
| Iron | ppm | ASTM D5185(m) | >500 | 33 | 142 | --- |
| Chromium | ppm | ASTM D5185(m) | >10 | <1 | 2 | --- |
| Nickel | ppm | ASTM D5185(m) | >10 | 0 | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | | <1 | <1 | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | <1 | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | 3 | 12 | --- |
| Lead | ppm | ASTM D5185(m) | >25 | 0 | <1 | --- |
| Copper | ppm | ASTM D5185(m) | >100 | 2 | 14 | --- |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | 0 | --- |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | <1 | --- |
| 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 | <1 | 2 | --- |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 0 | <1 | 1 | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | <1 | 3 | --- |
| Magnesium | ppm | ASTM D5185(m) | 9 | 11 | 17 | --- |
| Calcium | ppm | ASTM D5185(m) | 3114 | 3096 | 3036 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1099 | 1109 | 1098 | --- |
| Zinc | ppm | ASTM D5185(m) | 1245 | 1234 | 1268 | --- |
| Sulfur | ppm | ASTM D5185(m) | 7086 | 12172 | 8497 | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | 1 | --- |

CONTAMINANTS

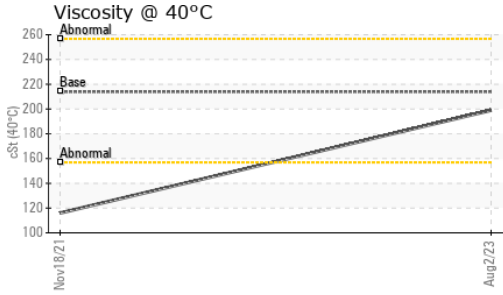
| | method | limit/base | current | history1 | history2 | |
|-----------|--------|---------------|---------|--------------|----------|-----|
| Silicon | ppm | ASTM D5185(m) | >75 | 14 | 83 | --- |
| Sodium | ppm | ASTM D5185(m) | | <1 | 5 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 4 | --- |

VISUAL

| | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal | scalar | Visual* | NONE | NONE | VLITE | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | --- |
| Precipitate | scalar | Visual* | NONE | NONE | NONE | --- |
| Silt | scalar | Visual* | NONE | NONE | VLITE | --- |
| Debris | scalar | Visual* | NONE | NONE | VLITE | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | --- |
| Appearance | scalar | Visual* | NORML | NORML | NORML | --- |
| Odor | scalar | Visual* | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | Visual* | >.2 | NEG | NEG | --- |
| Free Water | scalar | Visual* | | NEG | NEG | --- |



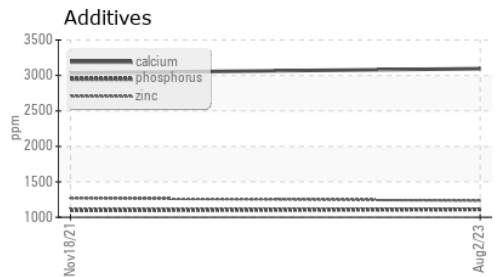
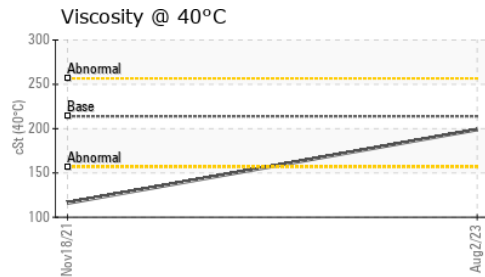
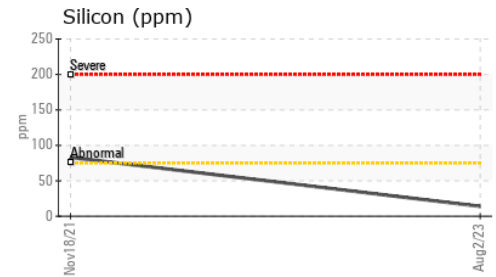
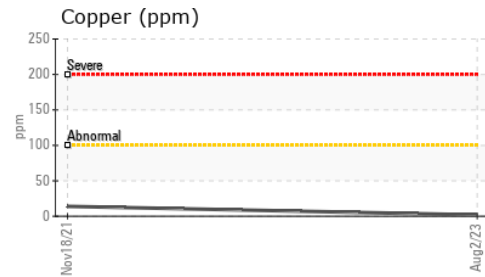
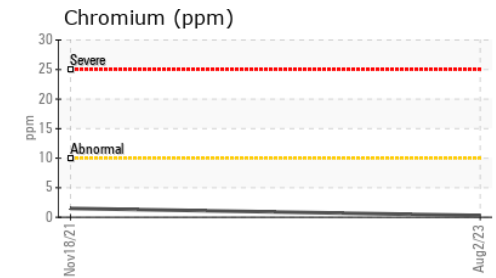
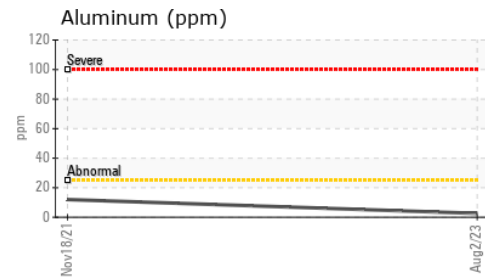
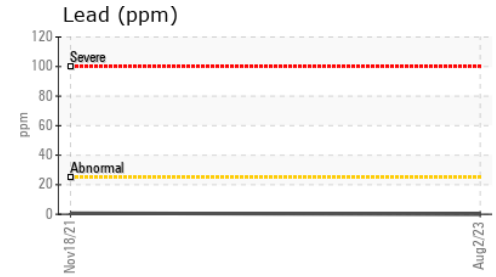
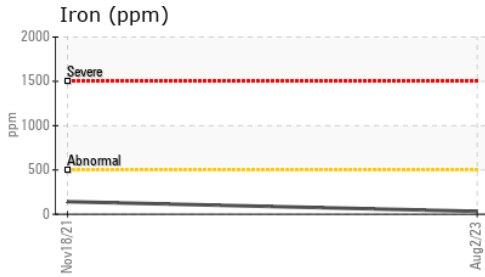
OIL ANALYSIS REPORT



| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|---------------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 213.9 | 199 | ▲ 116 | --- |

| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
|---------------|--|--------|------------|---------|----------|----------|
| Color | | | | | | no image |
| Bottom | | | | | | no image |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill
Sample No. : GFL0087364 **Received** : 11 Aug 2023
Lab Number : 02575433 **Diagnosed** : 11 Aug 2023
Unique Number : 5620484 **Diagnostician** : Wes Davis
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.

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