



OIL ANALYSIS REPORT

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

Machine Id
38 IANNUZZI
 Component
Diesel Engine
 Fluid
PETRO CANADA XR 4 SAE 15W40 (--- GAL)

RECOMMENDATION

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

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | WC0897585 | WC0849130 | --- |
| Sample Date | | Client Info | | 29 Jan 2024 | 05 Sep 2023 | --- |
| Machine Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Age | hrs | Client Info | | 0 | 0 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | N/A | N/A | --- |
| Filter Changed | | Client Info | | N/A | N/A | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|----------|----|-----|
| Iron | ppm | ASTM D5185(m) | >100 | 2 | 5 | --- |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | <1 | --- |
| Nickel | ppm | ASTM D5185(m) | >4 | 0 | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | | 6 | 52 | --- |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | --- |
| Aluminum | ppm | ASTM D5185(m) | >20 | 2 | 3 | --- |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | <1 | --- |
| Copper | ppm | ASTM D5185(m) | >330 | 2 | 9 | --- |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | <1 | --- |

CONTAMINATION

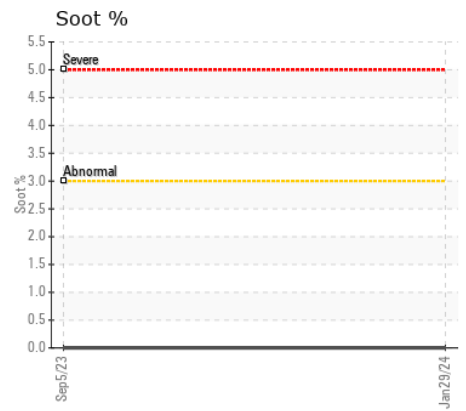
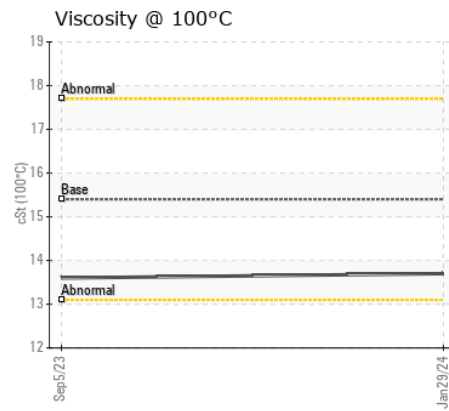
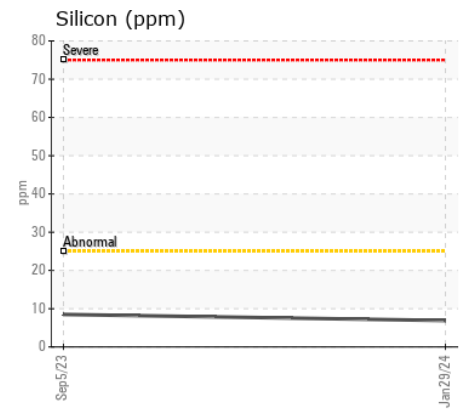
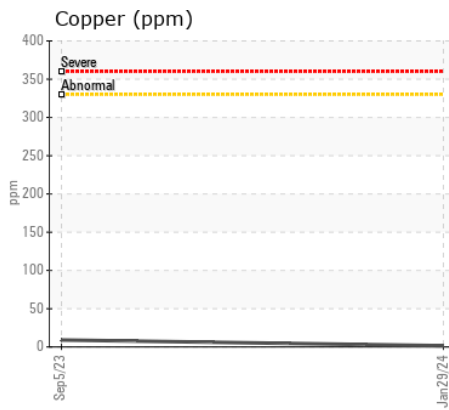
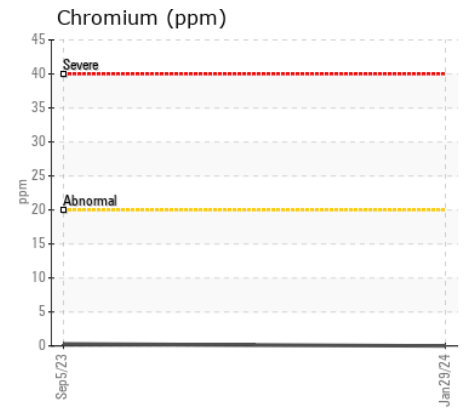
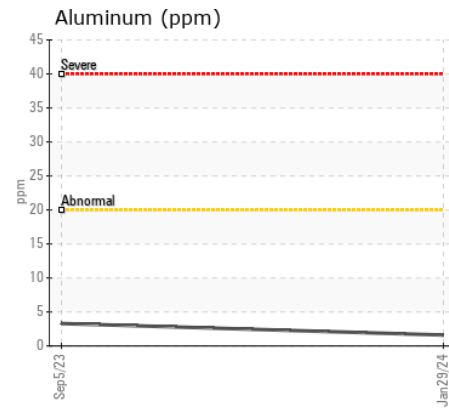
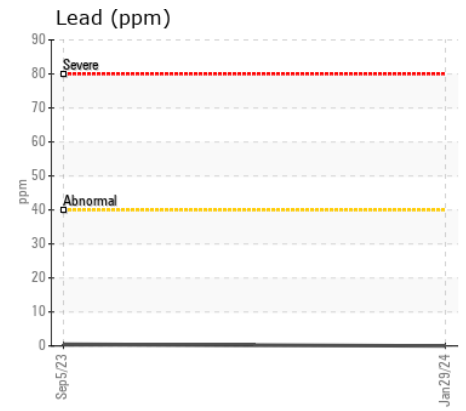
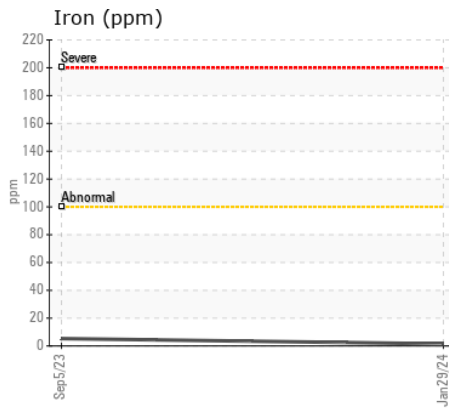
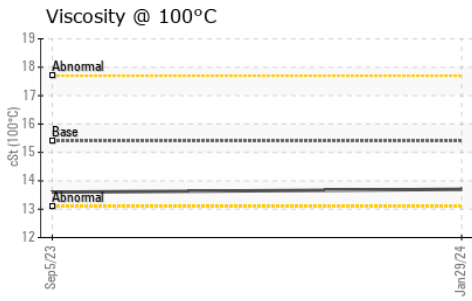
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|-----|
| Silicon | ppm | ASTM D5185(m) | >25 | 7 | 8 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 1 | 4 | --- |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | ASTM D7844* | >3 | 0 | 0 | --- |
| Nitration | Abs/cm | ASTM D7624* | >20 | 4.7 | 6.6 | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 18.1 | 18.5 | --- |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | --- |

FLUID CONDITION

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

| | | | | | | |
|--------------|----------|---------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185(m) | | 1 | 4 | --- |
| Boron | ppm | ASTM D5185(m) | 1 | 17 | 120 | --- |
| Barium | ppm | ASTM D5185(m) | 1 | <1 | 3 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 1 | 51 | 12 | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | <1 | --- |
| Magnesium | ppm | ASTM D5185(m) | 10 | 875 | 384 | --- |
| Calcium | ppm | ASTM D5185(m) | 3032 | 1119 | 1535 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1054 | 1014 | 884 | --- |
| Zinc | ppm | ASTM D5185(m) | 1332 | 1126 | 1026 | --- |
| Sulfur | ppm | ASTM D5185(m) | 3985 | 2924 | 2855 | --- |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 13.2 | 14.2 | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.4 | 13.7 | 13.6 | --- |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0897585 **Received** : 01 Mar 2024
Lab Number : 02619234 **Tested** : 01 Mar 2024
Unique Number : 5736344 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : MOB 1

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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.