

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



FORD 618 (S/N 1FM5K8AR3GGC91635)

Component

Gasoline Engine

PETRO CANADA SUPREME 5W20 MOTOR OIL (6 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

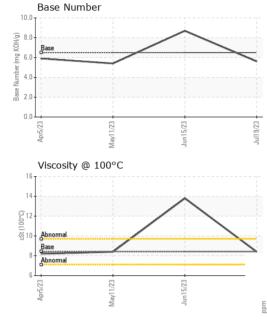
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION method limit/base current history1 Sample Number Client Info PCA0100373 PCA0097971 Sample Date Client Info 19 Jul 2023 15 Jun 2023 Machine Age mls Client Info 106514 104795 Oil Age mls Client Info 1719 1446 Oil Changed Client Info Changed Changed Sample Status NORMAL ATTENTION CONTAMINATION method limit/base current history1 Fuel WC Method V.0 <1.0 <1.0 Glycol WC Method NEG NEG WEAR METALS method limit/base current history1 Iron ppm ASTM D5185m >150 4 12 Chromium ppm ASTM D5185m >20 0 2 Nickel ppm ASTM D5185m >5 <1 <1 Titanium p | history2 PCA0097969 11 May 2023 103349 1598 Changed NORMAL history2 <1.0 NEG history2 3 <1 <1 0 0 <1 |
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| WEAR METALS method limit/base current history1 Iron ppm ASTM D5185m >150 4 12 Chromium ppm ASTM D5185m >20 0 2 Nickel ppm ASTM D5185m >5 <1 | history2 3 <1 <1 0 0 |
| Iron ppm ASTM D5185m >150 4 12 Chromium ppm ASTM D5185m >20 0 2 Nickel ppm ASTM D5185m >5 <1 <1 Titanium ppm ASTM D5185m 0 <1 Silver ppm ASTM D5185m >2 0 0 Aluminum ppm ASTM D5185m >40 1 6 Lead ppm ASTM D5185m >50 <1 <1 Copper ppm ASTM D5185m >155 4 46 Tin ppm ASTM D5185m >10 0 1 Vanadium ppm ASTM D5185m 0 <1 | 3 <1 <1 0 0 |
| Chromium ppm ASTM D5185m >20 0 2 Nickel ppm ASTM D5185m >5 <1 | <1 <1 0 0 |
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| Copper ppm ASTM D5185m >155 4 46 Tin ppm ASTM D5185m >10 0 1 Vanadium ppm ASTM D5185m 0 <1 | <1 |
| Tin ppm ASTM D5185m >10 0 1 Vanadium ppm ASTM D5185m 0 <1 | 4 |
| Vanadium ppm ASTM D5185m 0 <1 | 0 |
| | 0 |
| ppin nominoriom | 0 |
| ADDITIVES method limit/base current history1 | history2 |
| Boron ppm ASTM D5185m 183 47 ▲ 11 | 81 |
| Barium ppm ASTM D5185m 0 2 0 | 0 |
| Molybdenum ppm ASTM D5185m 36 67 64 | 59 |
| Manganese ppm ASTM D5185m 0 <1 1 | <1 |
| Magnesium ppm ASTM D5185m 417 508 ▲ 978 | 422 |
| Calcium ppm ASTM D5185m 1318 1241 1136 | 1170 |
| Phosphorus ppm ASTM D5185m 773 693 ▲ 1054 | 643 |
| Zinc ppm ASTM D5185m 845 823 △ 1240 | 793 |
| Sulfur ppm ASTM D5185m 2690 2865 ▲ 3797 | 2591 |
| CONTAMINANTS method limit/base current history1 | history2 |
| Silicon ppm ASTM D5185m >30 15 5 | 13 |
| Sodium ppm ASTM D5185m >400 6 15 | 3 |
| Potassium ppm ASTM D5185m >20 <1 10 | 1 |
| INFRA-RED method limit/base current history1 | history2 |
| Soot % | 0 |
| | 0 |
| Nitration Abs/cm *ASTM D7624 >20 8.5 5.5 | 6.9 |
| | |
| | 6.9 |
| Sulfation Abs/.1mm *ASTM D7415 >30 18.5 17.2 | 6.9 17.4 |



OIL ANALYSIS REPORT



| VISUAL | | method | | | | history2 | |
|-------------------------|--------|---------|------------|---------|----------|----------|--|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE | |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE | |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE | |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE | |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE | |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE | |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML | |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML | |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG | |
| Free Water | scalar | *Visual | | NEG | NEG | NEG | |
| FLUID PROPE | RTIES | method | limit/base | current | history1 | history2 | |

4 OTL 4 D 4 4 F

| | Visc @ 100°C | cSt ASTM D445 | 8.42 | 8.4 | 13.8 | 8.4 | |
|------------|----------------|---------------|--------------------|----------------|----------|------------|------------|
| | GRAPHS | | | | | | |
| | Iron (ppm) | | | Lead (ppm |) | | |
| 50 40 | Severe | | | 200 Severe | | | |
| | | | | 100 | | | |
| ad 20 | Abnormal | | | Abnormal | 1 | | |
| 10 | 1: | | | 30 1 | | | |
| | Apr5/23 - | 5/23 | Jul19/23 | O Apr5/23 + | 1/23 | 5/23 | Jul19/23 |
| | Apr5/23 | Jun15/23 | Time of the second | April | May11/23 | Jun15/23 | Jing. |
| 10 | Aluminum (ppm) | | | Chromium | (ppm) | | |
| 8 | Devele | | | 40 Severe | 1 | | |
| E 6 | 0+ | | | € 30 | | | |
| Edd 4 | 0 - Abnormal | | | Abnormal | | | |
| 2 | 1: | | | 10 | | | |
| | Apr5/23 - | Jun15/23 - | Jul19/23 | Apr5/23 | 1/23 - | Jun15/23 - | Jul19/23 |
| | Apr5/23 | Jun | E E | Арг | May11/23 | Jun1 | Time C |
| 30 | Copper (ppm) | | | Silicon (ppr | m) | | |
| 25 | Course | | | 60 | | | |
| 20 | | | | E 40 | | | |
| 돌 15 10 | | | | Q. | | | |
| 5 | | | | 20 | | | |
| | Apr5/23 L | 5/23 + | Jul19/23 | O Apr5/23 + 1 | 1/23 | 5/23 | Jul19/23 + |
| | Apr5/23 | Jun15/23 | Jul 1 | Apr | May11/23 | Jun15/23 | Jul |
| | | | | | | | |

Base Number

10.0 (mg KOH/g)

Base Number 4.0

0.0





Laboratory Sample No. Lab Number

Unique Number : 10621838

: 05936567

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0100373

Viscosity @ 100°C

Received

May11/23 -

: 28 Aug 2023 Diagnosed : 29 Aug 2023 Diagnostician : Wes Davis Test Package : MOB 1 (Additional Tests: TBN)

Jun15/23

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

VILLAGE OF NORTH RIVERSIDE

2345 S DESPLAINES NORTH RIVERSIDE, IL US 60546

Contact: Service Manager vznrdpw@gmail.com

T: F:

Report Id: VILNOR [WUSCAR] 05936567 (Generated: 08/29/2023 13:47:20) Rev: 1

Contact/Location: Service Manager - VILNOR