

## **OIL ANALYSIS REPORT**

Sample Rating Trend



# SUBARU The "Ru" (S/N 4S3BNCD64G1009511)

Front Gasoline Engine

Fluid CASTROL EDGE FST 0W20 (--- 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 INFORM                    | <b>IATION</b>           | method                                    | limit/base | current     | history1         | history2 |
|----------------------------------|-------------------------|---|------------|-------------|------------------|----------|
| Sample Number                    |                         | Client Info                               |            | WC751147    | WC751153         |          |
| Sample Date                      |                         | Client Info                               |            | 01 Apr 2024 | 01 Nov 2023      |          |
| Machine Age                      | kms                     | Client Info                               |            | 185322      | 181918           |          |
| Oil Age                          | kms                     | Client Info                               |            | 5000        | 0                |          |
| Oil Changed                      |                         | Client Info                               |            | N/A         | Not Changd       |          |
| Sample Status                    |                         |   |            | NORMAL      | NORMAL           |          |
| CONTAMINATIO                     | N                       | method                                    | limit/base | current     | history1         | history2 |
| Fuel                             |                         | WC Method                                 | >4.0       | <1.0        | <1.0             |          |
| Water                            |                         | WC Method                                 | >0.2       | NEG         | NEG              |          |
| Glycol                           |                         | WC Method                                 |            | NEG         | NEG              |          |
| WEAR METALS                      |                         | method                                    | limit/base | current     | history1         | history2 |
|                                  | nnm                     |   |            |             | 4                |          |
| Iron                             | ppm                     | ASTM D5185(m)                             | >150       | 2<br>0      | 4                |          |
| Chromium                         | ppm                     | ASTM D5185(m)                             | >20        | 0           |                  |          |
| Nickel                           | ppm                     | ASTM D5185(m)                             | >5         | -           | 0                |          |
| Titanium<br>Silver               | ppm                     | ASTM D5185(m)                             | . 2        | <1          | 0                |          |
|                                  | ppm                     | ASTM D5185(m)                             | >2         | 0           | <1               |          |
| Aluminum                         | ppm                     | ASTM D5185(m)                             | >40        | 2           | 2                |          |
| Lead                             | ppm                     | ASTM D5185(m)                             | >50        | 0           | <1               |          |
| Copper                           | ppm                     | ASTM D5185(m)                             | >155       | <1          | 1                |          |
| Tin                              | ppm                     | ASTM D5185(m)                             | >10        | 0           | 0                |          |
| Antimony                         | ppm                     | ASTM D5185(m)                             |            | 0           | 0                |          |
| 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)                             |            | 168         | 115              |          |
| Barium                           | ppm                     | ASTM D5185(m)                             |            | 0           | <1               |          |
| Molybdenum                       | ppm                     | ASTM D5185(m)                             |            | 75          | 81               |          |
| Manganese                        | ppm                     | ASTM D5185(m)                             |            | 0           | 0                |          |
| Magnesium                        | ppm                     | ASTM D5185(m)                             |            | 549         | 604              |          |
| Calcium                          | ppm                     | ASTM D5185(m)                             | 745        | 1251        | 1394             |          |
| Phosphorus                       | ppm                     | ASTM D5185(m)                             |            | 655         | 772              |          |
| Zinc                             | ppm                     | ASTM D5185(m)                             | 840        | 754         | 863              |          |
| Sulfur                           | ppm                     | ASTM D5185(m)                             |            | 2328        | 2577             |          |
| Lithium                          | ppm                     | ASTM D5185(m)                             |            | <1          | <1               |          |
| CONTAMINANTS                     | ;                       | method                                    | limit/base | current     | history1         | history2 |
| Silicon                          | ppm                     | ASTM D5185(m)                             | >30        | 15          | 23               |          |
| Sodium                           | ppm                     | ASTM D5185(m)                             | >400       | 2           | 3                |          |
| Potassium                        | ppm                     | ASTM D5185(m)                             | >20        | <1          | 0                |          |
| INFRA-RED                        |                         | method                                    | limit/base | current     | history1         | history2 |
|                                  |                         |   |            | 0           | 0                |          |
| Soot %                           | %                       | ASTM D7844*                               |            | U           | 0                |          |
| Soot %<br>Nitration              |                         |   | >20        | 0<br>7.4    |                  |          |
| Soot %<br>Nitration<br>Sulfation | %<br>Abs/cm<br>Abs/.1mm | ASTM D7844*<br>ASTM D7624*<br>ASTM D7415* | >20<br>>30 | 7.4<br>17.3 | 0<br>8.8<br>21.4 |          |



## **OIL ANALYSIS REPORT**

500

400

300

200

100

100

60

40 20

0

300

250

200

E 150

100

50

10

: WC751147

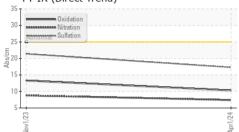
cSt (100°C)

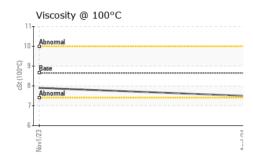
Laboratory

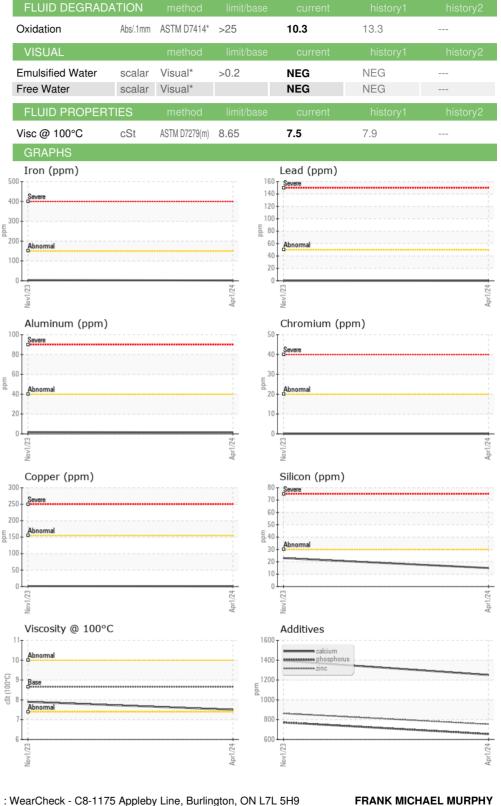
Sample No.

Lab Number : 02627300











Accredited Laboratory Unique Number : 5760432 Diagnosed : 08 Apr 2024 - 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.

Received

Tested

: 08 Apr 2024

: 08 Apr 2024

FRANK MICHAEL MURPHY

1208-1926 LAKESHORE BLVD W TORONTO, ON CA M6S 1A1 Contact: Mike Murphy fmmurphy@cadmus.ca T: (647)290-2689 E:

Report Id: FRA120TOR [WCAMIS] 02627300 (Generated: 04/08/2024 17:32:17) Rev: 1

CALA

ISO 17025:2017

Contact/Location: Mike Murphy - FRA120TOR Page 2 of 2