

OIL ANALYSIS REPORT

SUBARU OUTBACK 4611-05 H3329629 Component

Gasoline Engine NOT GIVEN (--- GAL)

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

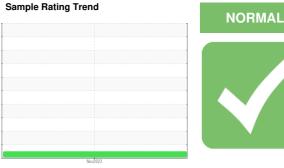
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





| | | | | Nov2023 | | | |
|---------------|----------|-------------|------------|-------------|----------|----------|--|
| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 | |
| Sample Number | | Client Info | | WC0795760 | | | |
| Sample Date | | Client Info | | 13 Nov 2023 | | | |
| Machine Age | mls | Client Info | | 0 | | | |
| Oil Age | mls | Client Info | | 0 | | | |
| Oil Changed | | Client Info | | N/A | | | |
| Sample Status | | | | NORMAL | | | |
| CONTAMINATION | ٧ | method | limit/base | current | history1 | history2 | |
| Fuel | | WC Method | >4.0 | <1.0 | | | |
| Water | | WC Method | >0.2 | NEG | | | |
| Glycol | | WC Method | | NEG | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | |
| Iron | ppm | ASTM D5185m | >150 | 6 | | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | | | |
| Nickel | ppm | ASTM D5185m | >5 | 0 | | | |
| Titanium | ppm | ASTM D5185m | | <1 | | | |
| Silver | ppm | ASTM D5185m | >2 | 0 | | | |
| Aluminum | ppm | ASTM D5185m | >40 | 3 | | | |
| Lead | ppm | ASTM D5185m | >50 | <1 | | | |
| Copper | ppm | ASTM D5185m | >155 | 2 | | | |
| Tin | ppm | ASTM D5185m | >10 | <1 | | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | |
| Boron | ppm | ASTM D5185m | | 28 | | | |
| Barium | ppm | ASTM D5185m | | 0 | | | |
| Molybdenum | ppm | ASTM D5185m | | 75 | | | |
| Manganese | ppm | ASTM D5185m | | <1 | | | |
| Magnesium | ppm | ASTM D5185m | | 478 | | | |
| Calcium | ppm | ASTM D5185m | | 1099 | | | |
| Phosphorus | ppm | ASTM D5185m | | 675 | | | |
| Zinc | ppm | ASTM D5185m | | 805 | | | |
| Sulfur | ppm | ASTM D5185m | | 2249 | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 | |
| Silicon | ppm | ASTM D5185m | >30 | 10 | | | |
| Sodium | ppm | ASTM D5185m | >400 | <1 | | | |
| Potassium | ppm | ASTM D5185m | >20 | 3 | | | |
| INFRA-RED | | method | limit/base | current | history1 | history2 | |
| Soot % | % | *ASTM D7844 | | 0.1 | | | |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.5 | | | |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.6 | | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 | |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 12.4 | | | |
| Oxidation | | | | | | | |

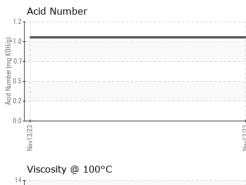


13 A

(100°C) 11-10-10-

Abnorma 9 8. Nov13/23

OIL ANALYSIS REPORT



| | VISUAL | | method | limit/base | current | history1 | history2 |
|--|---|----------------------|--------------------------------|--|--------------------|----------|----------------|
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | Precipitate | scalar | *Visual | NONE | NONE | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | _ Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| Mov13/23 | Appearance | scalar | *Visual | NORML | NORML | | |
| 2 | 0001 | scalar | *Visual | NORML | NORML | | |
| 0°C | Emulsified Water | scalar | *Visual | >0.2 | NEG | | |
| | Free Water | scalar | *Visual | | NEG | | |
| | FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| | Visc @ 100°C | cSt | ASTM D445 | | 9.3 | | |
| | GRAPHS | | | | | | |
| | Iron (ppm) | | | | Lead (ppm) | | |
| | 500 400 | | | 200 | Saura | | |
| | | | | 150 | | | |
| | 8 300 - Abnormal | | | 툡 100 | - | | |
| | 100 - | | | 50 | Abnormal | | |
| | | | | 0 | | | |
| | Nov13/23 | | | Nov13/23 | Nov13/23 | | Nov13/23 |
| | — | | | No | | > | No |
| | Aluminum (ppm) | | | 50 | Chromium (ppi | m) | |
| | 80 - | | | 40 | Severe | | |
| | 60 Abnormal | | | | | | |
| | Hereit and | | | ^ස 20 | - Abnormal | | |
| | 20 - | | | 10 | | | |
| | U | | | 0 | | | /23 |
| | Nov13/23 | | | Nov13/23 | Nov13/23 | | Nov13/23 |
| | Copper (ppm) | | | | _ Silicon (ppm) | | |
| | 300 | | | 80 | | | |
| | 250 - 200 | | | 60 | | | |
| | E 150 - Abnormal | | | 튭 40 | Ahnormal | | |
| | 100 - | | | 20 | | | |
| | 50 | | | | | | |
| | Nov13/23 | | | Nov13/23 | Nov13/23 | | Nov13/23 - |
| | | | | Nov | Nov | | Nov1 |
| | Viscosity @ 100°C | | | 1.2 | Acid Number | | |
| | 13 Abnormal | | | (B/H(10 | | | |
| | | | | ¥ 0.7 | | | |
| | 2712 0011 5710 7010 | | | 40,110 0.7 0.0 Jumper 0.2 0.2 0.2 | | | |
| | Abnormal | | | | | | |
| | 8 | | | 0.0 | L. | | |
| | Vov13/23 | | | Nav13/23 | Nov13/23 | | Nov13/23 |
| | 2 | | | 2 | 2 | | ž |
| Laboratory | : WearCheck USA - 5 | | | ry, NC 27513 Nov 2023 | 3 | DAVIDSC | NVILLE TECH |
| Sample No. Lab Number | : WC0795760 F : 06011623 F | | PO BOX 56 DAVIDSONVILLE, MD | | | | |
| TESTING LABORATORY | | Diagnose Diagnost | | Nov 2023 s Davis | | DAVID | US 21035 |
| Certificate L2367 Test Package | e : MOB 2 | • | | | | | HRIS ARNOLD |
| To discuss this sample report, | | | | | | cca140 |)6@yahoo.com |
| * - Denotes test methods that Statements of conformity to spe | | | | | ICGM 106.2012) | | T: x: F: x: |
| clatements of combinity to spe | | is simple | 2000010000 | | | | 1 |

Contact/Location: CHRIS ARNOLD - DAVDAVMD