# OIL REPORT

**LAB NUMBER:** S123702 **UNIT ID:** 11 CT200H
**REPORT DATE:** 10/4/2024 **CLIENT ID:** 257142
**CODE:** 63/1,430 **PAYMENT:** CC: Visa

**UNIT**

MAKE/MODEL: Toyota 1.8L 4-cyl (2ZR-FXE)
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO: Lexus
OIL TYPE & GRADE: Mobil 1 0W/20
OIL USE INTERVAL: 5,000 Miles

**CLIENT**

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**COMMENTS**

KORY: Amended report with correct unit info. There's coolant in this sample, which is visible in the high levels of potassium and sodium. That might be why the viscosity is thick for 0W/20, since coolant tends to thicken the oil. The good news is, this isn't a lot of coolant, and engine wear still looks okay. Compare wear metals (mainly aluminum - copper) to universal averages, which show typical wear for the engine type after an ~8,000-mile oil run. Internal parts are doing well. The TBN is strong, but stick with 5K miles (or less) until you can find and address the coolant leak.

**ELEMENTS IN PARTS PER MILLION**

| | | UNIT / LOCATION AVERAGES | | | | | | UNIVERSAL AVERAGES |
|---|---|---|---|---|---|---|---|---|
| MI/HR on Oil | 5,000 | | | | | | | |
| MI/HR on Unit | 289,000 | | | | | | | |
| Sample Date | 9/16/2024 | | | | | | | |
| Make Up Oil Added | 0 qts | | | | | | | |
| | | | | | | | | |
| ALUMINUM | 3 | 3 | | | | | | 4 |
| CHROMIUM | 0 | 0 | | | | | | 0 |
| IRON | 7 | 8 | | | | | | 8 |
| COPPER | 1 | 0 | | | | | | 1 |
| LEAD | 0 | 0 | | | | | | 0 |
| TIN | 0 | 0 | | | | | | 0 |
| MOLYBDENUM | 68 | 89 | | | | | | 113 |
| NICKEL | 0 | 0 | | | | | | 0 |
| MANGANESE | 1 | 0 | | | | | | 0 |
| SILVER | 0 | 0 | | | | | | 0 |
| TITANIUM | 13 | 0 | | | | | | 2 |
| POTASSIUM | **273** | 2 | | | | | | 2 |
| BORON | 10 | 42 | | | | | | 55 |
| SILICON | 16 | 8 | | | | | | 12 |
| SODIUM | **105** | 4 | | | | | | 12 |
| CALCIUM | 818 | 1060 | | | | | | 1347 |
| MAGNESIUM | 581 | 609 | | | | | | 494 |
| PHOSPHORUS | 515 | 780 | | | | | | 652 |
| ZINC | 661 | 848 | | | | | | 750 |
| BARIUM | 0 | 0 | | | | | | 0 |

**PROPERTIES**

| | | Values Should Be* | | | | | |
|---|---|---|---|---|---|---|---|
| SUS Viscosity @ 210°F | **59.5** | 46-57 | | | | | |
| cSt Viscosity @ 100°C | **10.07** | 6.0-9.7 | | | | | |
| Flashpoint in °F | 395 | >385 | | | | | |
| Fuel % | <0.5 | <2.0 | | | | | |
| Antifreeze % | **0.21** | 0.0 | | | | | |
| Water % | 0.0 | 0.0 | | | | | |
| Insolubles % | 0.1 | <0.6 | | | | | |
| TBN | 4.3 | >2.0 | | | | | |
| TAN | | | | | | | |
| ISO Code | | | | | | | |

*** THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE**

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