



# OIL REPORT

LAB NUMBER: E73152  
REPORT DATE: 10/3/2011  
CODE: 20/75

UNIT ID: 10 PRIUS-TA  
CLIENT ID:  
PAYMENT: CC: MC

## UNIT

MAKE/MODEL: Transaxle Toyota Prius  
FUEL TYPE:  
ADDITIONAL INFO:

OIL TYPE & GRADE: Toyota WS ATF  
OIL USE INTERVAL: 30,171 Miles

## COMMENTS

THOMAS: Amended report showing correct equipment and history. Note the increase in aluminum. We're unsure were exactly that aluminum is coming from. Normally, gears are made of steel, but this gear set could well have aluminum in it. At any rate, it's probably not a metal that should track with time on the oil, and it's unusual to see it increase after a wear-in factory sample. Insolubles likely show some excessive heat/use. Try dropping back to 20,000 miles on the next ATF. Does the dealer have any thoughts regarding aluminum? Let us know what you find out.

| ELEMENTS IN PARTS PER MILLION | MI/HR on Oil      | 30,171   | UNIT /<br>LOCATION<br>AVERAGES | 19,687   |  |  |  |  |     |
|-------------------------------|-------------------|----------|--------------------------------|----------|--|--|--|--|-----|
|                               | MI/HR on Unit     |          |                                | 19,687   |  |  |  |  |     |
|                               | Sample Date       | 09/23/11 |                                | 05/08/10 |  |  |  |  |     |
|                               | Make Up Oil Added | 0 qts    |                                | 0 qts    |  |  |  |  |     |
|                               |                   |          |                                |          |  |  |  |  |     |
|                               | ALUMINUM          | 144      | 127                            | 110      |  |  |  |  | 48  |
|                               | CHROMIUM          | 1        | 2                              | 2        |  |  |  |  | 2   |
|                               | IRON              | 37       | 46                             | 55       |  |  |  |  | 128 |
|                               | COPPER            | 14       | 18                             | 21       |  |  |  |  | 25  |
|                               | LEAD              | 1        | 1                              | 1        |  |  |  |  | 2   |
|                               | TIN               | 1        | 2                              | 2        |  |  |  |  | 3   |
|                               | MOLYBDENUM        | 1        | 1                              | 1        |  |  |  |  | 0   |
|                               | NICKEL            | 3        | 3                              | 3        |  |  |  |  | 5   |
|                               | MANGANESE         | 2        | 5                              | 7        |  |  |  |  | 3   |
|                               | SILVER            | 0        | 0                              | 0        |  |  |  |  | 0   |
|                               | TITANIUM          | 0        | 0                              | 0        |  |  |  |  | 0   |
|                               | POTASSIUM         | 0        | 2                              | 4        |  |  |  |  | 2   |
|                               | BORON             | 63       | 55                             | 46       |  |  |  |  | 75  |
|                               | SILICON           | 52       | 92                             | 132      |  |  |  |  | 130 |
|                               | SODIUM            | 0        | 2                              | 3        |  |  |  |  | 4   |
|                               | CALCIUM           | 122      | 133                            | 143      |  |  |  |  | 175 |
|                               | MAGNESIUM         | 1        | 2                              | 2        |  |  |  |  | 4   |
|                               | PHOSPHORUS        | 292      | 290                            | 288      |  |  |  |  | 311 |
|                               | ZINC              | 9        | 12                             | 14       |  |  |  |  | 14  |
|                               | BARIUM            | 0        | 2                              | 4        |  |  |  |  | 16  |

Values  
Should Be\*

| PROPERTIES | SUS Viscosity @ 210°F | 43.4 | 43-51   | 42.0 |  |  |  |  |
|------------|-----------------------|------|---------|------|--|--|--|--|
|            | cSt Viscosity @ 100°C | 5.22 | 5.1-7.9 | 4.78 |  |  |  |  |
|            | Flashpoint in °F      | 370  | >320    | 380  |  |  |  |  |
|            | Fuel %                | -    |         | -    |  |  |  |  |
|            | Antifreeze %          | -    |         | -    |  |  |  |  |
|            | Water %               | 0.0  | <0.1    | 0.0  |  |  |  |  |
|            | Insolubles %          | 0.1  | <0.1    | 0.2  |  |  |  |  |
|            | TBN                   |      |         |      |  |  |  |  |
|            | TAN                   |      |         |      |  |  |  |  |
|            | ISO Code              |      |         |      |  |  |  |  |

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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