# OIL REPORT

**LAB NUMBER:** D77990
**REPORT DATE:** 6/11/2009
**CODE:** 44/284

**UNIT ID:** 04 S2K-DIFF
**CLIENT ID:** 17858
**PAYMENT:** Prepaid

**UNIT**

EQUIP. MAKE/MODEL: Differential Honda
FUEL TYPE:
ADDITIONAL INFO:

OIL TYPE & GRADE: LE Duolec 1605 SAE110 GL5
OIL USE INTERVAL: 6,000 Miles

**CLIENT**

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**COMMENTS**

JACK: This differential oil sample checked-in as normal in all tests. With metals, silicon, and insolubles at these levels, you could have gone longer on this oil. The viscosity was in spec for this oil type and grade, and no moisture was present. 0.2% insolubles shows the oil wasn't excessively oxidized or contaminated with grit or metals. Insolubles are solids in the oil, usually oxidized oil from heat and use, but they are also often from metals, grit, or miscellaneous debris. If there are any problems with this differential, they don't show up in the used oil.

**ELEMENTS IN PARTS PER MILLION**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MI/HR on Oil | 6,000 | UNIT / LOCATION AVERAGES | 11,415 | 8,000 | | | | UNIVERSAL AVERAGES |
| MI/HR on Unit | 46,442 | | 26,250 | 14,835 | | | | |
| Sample Date | 05/29/09 | | 03/23/06 | 01/26/05 | | | | |
| Make Up Oil Added | 0 qts | | 0 qts | 0 qts | | | | |
| | | | | | | | | |
| ALUMINUM | 0 | 1 | 2 | 1 | | | | 2 |
| CHROMIUM | 1 | 1 | 1 | 2 | | | | 2 |
| IRON | 79 | 146 | 172 | 188 | | | | 157 |
| COPPER | 0 | 0 | 0 | 1 | | | | 1 |
| LEAD | 0 | 0 | 0 | 0 | | | | 1 |
| TIN | 0 | 0 | 0 | 0 | | | | 0 |
| MOLYBDENUM | 0 | 0 | 0 | 0 | | | | 1 |
| NICKEL | 9 | 15 | 17 | **20** | | | | 17 |
| MANGANESE | 1 | 2 | 4 | 0 | | | | 5 |
| SILVER | 0 | 0 | 0 | 0 | | | | 0 |
| TITANIUM | 1 | 0 | 0 | 0 | | | | 0 |
| POTASSIUM | 1 | 3 | 1 | 6 | | | | 2 |
| BORON | 44 | 29 | 12 | 32 | | | | 165 |
| SILICON | 10 | 29 | 41 | 36 | | | | 27 |
| SODIUM | 2 | 2 | 2 | 1 | | | | 2 |
| CALCIUM | 9 | 10 | 6 | 14 | | | | 28 |
| MAGNESIUM | 5 | 9 | 13 | 8 | | | | 118 |
| PHOSPHORUS | 1190 | 1421 | 1591 | 1481 | | | | 1514 |
| ZINC | 11 | 12 | 14 | 11 | | | | 29 |
| BARIUM | 1 | 1 | 0 | 2 | | | | 3 |

**PROPERTIES**

| | | Values Should Be* | | | | | |
|---|---|---|---|---|---|---|---|
| SUS Viscosity @ 210°F | 97.2 | 85-105 | 93.4 | 89.4 | | | |
| cSt Viscosity @ 100°C | 19.69 | 16.8-21.8 | 18.79 | 17.83 | | | |
| Flashpoint in °F | 425 | >425 | 425 | 425 | | | |
| Fuel % | - | | <0.5 | - | | | |
| Antifreeze % | - | | 0.0 | - | | | |
| Water % | 0.0 | <0.1 | 0.0 | 0.0 | | | |
| Insolubles % | 0.2 | <0.6 | 0.3 | 0.5 | | | |
| TBN | | | | | | | |
| TAN | | | | | | | |
| ISO Code | | | | | | | |

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

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