



OIL REPORT

LAB NUMBER:
 REPORT DATE: 6/1/2010
 CODE:

UNIT ID: 08 CUMMINS
 CLIENT ID:
 PAYMENT:

| | | |
|------|--------------------------|---|
| UNIT | MAKE/MODEL: Cummins 6.7L | OIL TYPE & GRADE: Valvoline Premium Blue 15W/40 |
| | FUEL TYPE: Diesel | OIL USE INTERVAL: 7,583 Miles |
| | ADDITIONAL INFO: 2008 | |

| | |
|--------|------------|
| CLIENT | PHONE: |
| | FAX: |
| | ALT PHONE: |
| | EMAIL: |

COMMENTS JOHN: The viscosity is still reading low in the oil from your 6.7L, but the flash point is still good. Until we find a low flash point, which would indicate fuel in the oil, we will not worry about the viscosity, because it's working okay for your engine. Wear levels are reading around averages, and it's nice to see iron improve a little after a slightly longer oil run. We're also glad to see potassium drop down to virtually nothing, since that can show anti-freeze contamination. Insolubles were low at 0.3%, showing good oil filtration and complete combustion. Nice report at 22,140 miles.

| ELEMENTS IN PARTS PER MILLION | MI/HR on Oil | 7,583 | UNIT / LOCATION AVERAGES | 7,076 | 4,896 | 2,585 | UNIVERSAL AVERAGES |
|-------------------------------|-------------------|----------|--------------------------|----------|----------|----------|--------------------|
| | MI/HR on Unit | 22,140 | | 14,557 | 7,481 | 2,585 | |
| | Sample Date | 05/23/10 | | 01/01/10 | 07/11/09 | 04/25/09 | |
| | Make Up Oil Added | 0 qts | | 0 qts | 0 qts | 0 qts | |
| ALUMINUM | 2 | 3 | 5 | 3 | 3 | 3 | 3 |
| CHROMIUM | 2 | 2 | 2 | 1 | 2 | 2 | 1 |
| IRON | 34 | 54 | 36 | 38 | 107 | 26 | 26 |
| COPPER | 3 | 15 | 5 | 6 | 44 | 8 | 8 |
| LEAD | 3 | 2 | 1 | 2 | 3 | 1 | 1 |
| TIN | 4 | 3 | 4 | 2 | 3 | 1 | 1 |
| MOLYBDENUM | 39 | 38 | 36 | 40 | 38 | 37 | 37 |
| NICKEL | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| MANGANESE | 1 | 2 | 1 | 1 | 6 | 0 | 0 |
| SILVER | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| TITANIUM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POTASSIUM | 1 | 10 | 21 | 5 | 12 | 7 | 7 |
| BORON | 3 | 4 | 3 | 3 | 5 | 60 | 60 |
| SILICON | 5 | 14 | 7 | 9 | 34 | 5 | 5 |
| SODIUM | 9 | 9 | 5 | 5 | 16 | 6 | 6 |
| CALCIUM | 849 | 966 | 904 | 1117 | 993 | 1534 | 1534 |
| MAGNESIUM | 993 | 841 | 680 | 859 | 833 | 486 | 486 |
| PHOSPHORUS | 1195 | 979 | 852 | 1042 | 827 | 938 | 938 |
| ZINC | 1324 | 1217 | 1059 | 1325 | 1159 | 1147 | 1147 |
| BARIUM | 0 | 5 | 0 | 2 | 18 | 0 | 0 |

Values Should Be*

| | | | | | | | |
|------------|-----------------------|-------|-----------|------|-------|------|--|
| PROPERTIES | SUS Viscosity @ 210°F | 59.2 | 69-78 | 55.2 | 62.9 | 58.6 | |
| | cSt Viscosity @ 100°C | 10.00 | 12.7-15.3 | 8.82 | 11.04 | 9.81 | |
| | Flashpoint in °F | 415 | >390 | 385 | 390 | 350 | |
| | Fuel % | <0.5 | <2.0 | 0.5 | TR | 6.5 | |
| | Antifreeze % | 0.0 | 0.0 | ? | 0.0 | 0.0 | |
| | Water % | 0.0 | <0.1 | 0.0 | 0.0 | 0.0 | |
| | Insolubles % | 0.3 | <0.8 | 0.3 | 0.4 | 0.2 | |
| | TBN | | | | | | |
| | TAN | | | | | | |
| | ISO Code | | | | | | |

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com