Donaldson
FILTRATION SOLUTIONS

Clean Fuel & Lubricant Solutions

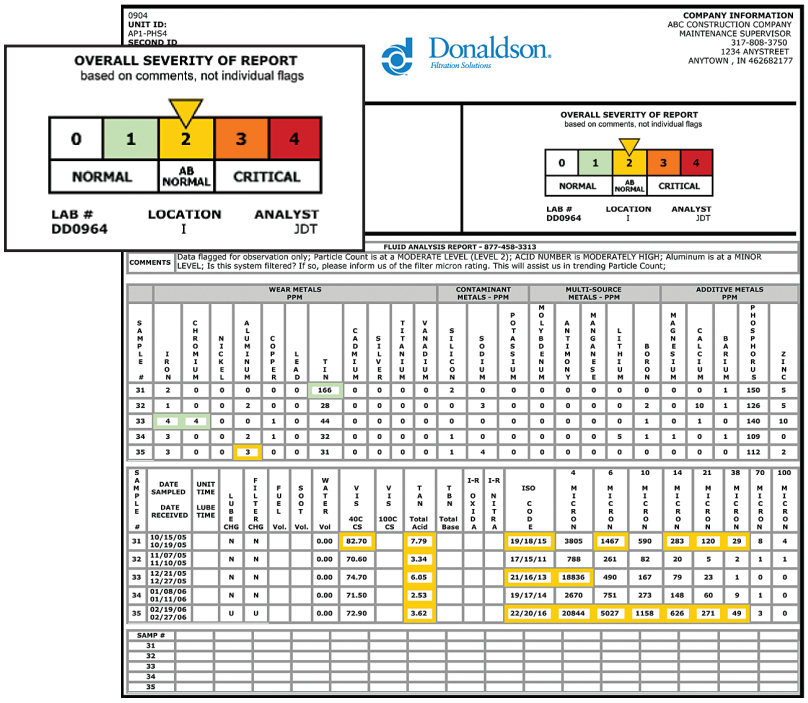
# Having Trouble Obtaining Targeted Oil Cleanliness Codes?

## Donaldson Company – Fluid Power Filtration

**Are you having trouble achieving and maintaining your required Oil Cleanliness Levels? Donaldson can help.**

Maintenance teams are demanding fuels and oils to be cleaned to certain cleanliness levels to ensure maximum uptime and reduce operating costs. It is a industry challenge to achieve and maintain those levels. Donaldson has developed the products and the method to do it.

## Contact Donaldson to help "Clean" your fluids.



0904
UNIT ID:
API-PHS4
SECOND ID

**OVERALL SEVERITY OF REPORT**
based on comments, not individual flags

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| NORMAL | | AB NORMAL | CRITICAL | |

LAB # DD0964 | LOCATION I | ANALYST JDT

Donaldson. Filtration Solutions

COMPANY INFORMATION
ABC CONSTRUCTION COMPANY
MAINTENANCE SUPERVISOR
317-808-3750
1234 ANYSTREET
ANYTOWN , IN 462682177

OVERALL SEVERITY OF REPORT
based on comments, not individual flags

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| NORMAL | | AB NORMAL | CRITICAL | |

LAB # DD0964 | LOCATION I | ANALYST JDT

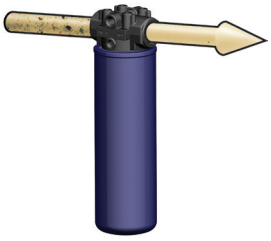
FLUID ANALYSIS REPORT - 877-458-3313

COMMENTS: Data flagged for observation only; Particle Count is at a MODERATE LEVEL (LEVEL 2); ACID NUMBER is MODERATELY HIGH; Aluminum is at a MINOR LEVEL; Is this system filtered? If so, please inform us of the filter micron rating. This will assist us in trending Particle Count;

| | WEAR METALS PPM | | | | | | | | | | | CONTAMINANT METALS - PPM | | | MULTI-SOURCE METALS - PPM | | | | ADDITIVE METALS PPM | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE # | IRON | CHROMIUM | NICKEL | ALUMINUM | COPPER | LEAD | TIN | CADMIUM | SILVER | TITANIUM | VANADIUM | SILICON | SODIUM | POTASSIUM | MOLYBDENUM | ANTIMONY | MANGANESE | LITHIUM | BORON | MAGNESIUM | CALCIUM | BARIUM | PHOSPHORUS | ZINC |
| 31 | 2 | 0 | 0 | 0 | 0 | 0 | 166 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 150 | 5 |
| 32 | 1 | 0 | 0 | 2 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 10 | 1 | 126 | 5 |
| 33 | 4 | 4 | 0 | 0 | 1 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 140 | 10 |
| 34 | 3 | 0 | 0 | 2 | 1 | 0 | 32 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 1 | 0 | 1 | 109 | 0 |
| 35 | 3 | 0 | 0 | 3 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 2 |

| SAMPLE # | DATE SAMPLED / DATE RECEIVED | UNIT TIME / LUBE TIME | LUBE CHG | FILTER CHG | FUEL Vol. | SOOT Vol. | WATER Vol | VIS 40C CS | VIS 100C CS | TAN Total Acid | TBN Total Base | I-R OXIDA | I-R NITRA | ISO CODE | 4 MICRON | 6 MICRON | 10 MICRON | 14 MICRON | 21 MICRON | 38 MICRON | 70 MICRON | 100 MICRON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 10/15/05 10/19/05 | | N | N | | | 0.00 | 82.70 | | 7.79 | | | | 19/18/15 | 3805 | 1467 | 590 | 283 | 120 | 29 | 8 | 4 |
| 32 | 11/07/05 11/10/05 | | N | N | | | 0.00 | 70.60 | | 3.34 | | | | 17/15/11 | 788 | 261 | 82 | 20 | 5 | 2 | 1 | 1 |
| 33 | 12/21/05 12/27/05 | | N | N | | | 0.00 | 74.70 | | 6.05 | | | | 21/16/13 | 18836 | 490 | 167 | 79 | 23 | 1 | 0 | 0 |
| 34 | 01/08/06 01/11/06 | | N | N | | | 0.00 | 71.50 | | 2.53 | | | | 19/17/14 | 2670 | 751 | 273 | 148 | 60 | 9 | 1 | 0 |
| 35 | 02/19/06 02/27/06 | | U | U | | | 0.00 | 72.90 | | 3.62 | | | | 22/20/16 | 20844 | 5027 | 1158 | 626 | 271 | 49 | 3 | 0 |

| SAMP # |
|---|
| 31 |
| 32 |
| 33 |
| 34 |
| 35 |



Donaldson's filters are designed to achieve ISO Cleanliness Codes of 18/16/13, 16/14/11 and 14/13/11 in single pass filtration. Why waste time and money pushing your fluids through a filter multiple times to achieve the same results as one pass?

Oil analysis reports can tell you many things about your oil and how effective your filtration is. Donaldson representatives can assess your filtration with your oil analysis reports and recommend changes to get to your goal. Good housekeeping may be the only thing you need. Let us show you how to achieve clean oils.

**Donaldson Company, Inc.**
**Minneapolis, MN**

**North America** 800-374-1374

**www.donaldsonfilters.com**

**Brochure No. F111502 ENG (10/12)**
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