

CONTAMINATION OIL CONDITION WEAR NORMAL NORMAL

305 - Front Right Diesel Engine

Unit Make : 04 FREIGHTLINER

Unit Model : M-2 Serial No : 1FVAC7DC07HX70097 Date Rec'd : Jan 24, 2012 Cust. Ref No. Sample Date : Jan 17, 2012 : CATERPILLAR $: \{n/a\}$ Comp Make : C-7 Stub No. : KL-MF006415 Diagnostician : Don Baldridge Comp Model

| Comp Model : C-/ | Stub No. | : KL-MF006415 | 006415 Diagnostician : Don Baldridge | | | | |
|-------------------------------------------------------|--------------------------|---------------|--------------------------------------|----------|----------|---------|------|
| RECOMMENDATION | | Sample Date | 04/19/11 | 07/14/11 | 10/12/11 | Current | UOM |
| Resample at the next service interval to monitor. | | Time on Unit | 5913 | 6275 | 6605 | 6927 | hrs |
| | | Time on Oil | 269 | 631 | 961 | 1283 | hrs |
| | | Time on Fltr | 269 | 362 | 330 | 322 | hrs |
| | | Oil Maint. | not chg | not chg | not chg | changed | |
| | | Filter Maint. | changed | changed | changed | changed | |
| CONTAMINATION | | Sample Date | 04/19/11 | 07/14/11 | 10/12/11 | Current | Abn |
| | ination in the component | Silicon | 2.1 | 4.8 | 5.9 | 5.5 | 15 |
| There is no indication of any contam | mation in the component. | Fuel (%) | <2.0 | <2.0 | <2.0 | <2.0 | |
| | | Glycol | | | | | 0.02 |
| | | Water (%) | < 0.1 | < 0.1 | < 0.1 | < 0.1 | 0.1 |
| | | Soot (%) | 0.2 | 0.2 | 0.3 | 0.4 | |
| | | >4µm(c) | | | | | |
| | | >6μm(c) | | | | | |
| | | >14µm(c) | | | | | |
| | | >21µm(c) | | | | | |
| | | >38µm(c) | | | | | |
| | | >70µm(c) | | | | | |
| | | ISO 4406(c) | | | | | |
| OIL CONDITION | | Sample Date | 04/19/11 | 07/14/11 | 10/12/11 | Current | Base |
| | 1 | Potassium | 2.9 | 0.0 | 0.0 | 2.3 | |
| Oil Type: 10 GAL of (GENERIC) SAE 15W40 | | Boron | 21 | 22 | 18 | 19 | |
| The condition of oil is suitable for further service. | | Barium | 0.1 | 0.0 | 0.0 | 0.0 | |
| | | Calcium | 2305 | 2130 | 2636 | 2443 | |
| | | Magnesium | 11 | 7.4 | 8.1 | 7.1 | |
| | | Molybdenum | 0.3 | 0.0 | 1.6 | 0.7 | |
| | | Sodium | 0.8 | 0.6 | 1.4 | 1.5 | |
| | | Phosphorus | 933 | 951 | 1076 | 963 | |
| | | Sulfur | 4769 | 3844 | 4242 | 3979 | |
| | | Zinc | 1107 | 1028 | 1186 | 1140 | |
| | | Visc@100°C | 13.81 | 14.26 | 13.94 | 14.23 | 14.5 |
| | | TBN | 9.97 | 9.35 | 8.0 | 7.21 | |
| WEAR | | Sample Date | 04/19/11 | 07/14/11 | 10/12/11 | Current | Abn |
| | I | PQ | | | | | |
| All component wear rates are normal | | Iron | 14 | 24 | 36 | 43 | |
| | | Nickel | 0.0 | 0.0 | 0.0 | 0.1 | |
| | | Chromium | 0.9 | 1.5 | 2.2 | 2.3 | |
| | | Titanium | 0.0 | 0.3 | 0.4 | 0.0 | |
| | | Copper | 0.5 | 1.1 | 2.0 | 2.8 | |
| | | Aluminum | 1.0 | 1.5 | 1.7 | 1.9 | |
| | | Tin | 0.2 | 0.0 | 0.0 | 0.4 | |
| | | Lead | 1.6 | 3.3 | 3.1 | 3.9 | |
| | | | | | | | |