

Machine Id **441371** Component **Diesel Engine** Fluid **MOBIL DELVAC 1300 SUPER 15W40 (24 QTS)**

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|------------------|----------|-------------|-----------|-------------|-------------|-------------|
| No corrective action is recommended at this time. We recommend an early resample to monitor this condition. | Sample Number | | Client Info | | IL0033972 | IL0030522 | IL0026559 |
| | Sample Date | | Client Info | | 05 Jul 2024 | 16 Nov 2023 | 08 May 2023 |
| | Machine Age | mls | Client Info | | 172160 | 152533 | 138243 |
| | Oil Age | mls | Client Info | | 0 | 0 | 0 |
| | Filter Age | mls | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | N/A | N/A | N/A |
| | Filter Changed | | Client Info | | N/A | N/A | N/A |
| | Sample Status | | | | ABNORMAL | NORMAL | NORMAL |
| WEAR All component wear rates are normal. | Iron | ppm | ASTM D5185m | >90 | 49 | 18 | 13 |
| | Chromium | ppm | ASTM D5185m | >20 | 1 | <1 | <1 |
| | Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| | Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| | Silver | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >20 | 11 | 6 | 4 |
| | Lead | ppm | ASTM D5185m | >40 | <1 | 0 | 0 |
| | Copper | ppm | ASTM D5185m | >330 | 10 | 4 | 2 |
| | Tin | ppm | ASTM D5185m | >15 | <1 | <1 | 0 |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION Sodium and/or potassium levels are high. Test for glycol is negative. | Silicon | ppm | ASTM D5185m | >25 | 13 | 7 | 6 |
| | Potassium | ppm | ASTM D5185m | >20 | A 84 | 11 | 8 |
| | Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| | Water | | WC Method | >0.2 | NEG | NEG | NEG |
| | Glycol | % | *ASTM D2982 | | NEG | NEG | NEG |
| | Soot % | % | *ASTM D7844 | >6 | 0.9 | 0.5 | 0.4 |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 13.2 | 9.4 | 8.7 |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 24.6 | 20.3 | 18.6 |
| | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | NORM |
| | Odor | scalar | *Visual | NORML | NORML | NORML | NORMI |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 20 | 2 | 0 |
| | Boron | ppm | ASTM D5185m | 0 | 6 | 4 | 10 |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | 0 | 68 | 62 | 59 |
| | Manganese | ppm | ASTM D5185m | | 1 | 0 | <1 |
| | Magnesium | ppm | ASTM D5185m | 0 | 934 | 922 | 930 |
| | Calcium | ppm | ASTM D5185m | | 1165 | 1032 | 1222 |
| | Phosphorus | ppm | ASTM D5185m | | 949 | 1004 | 1026 |
| | Zinc | ppm | ASTM D5185m | | 1262 | 1208 | 1267 |
| | Sulfur | ppm | ASTM D5185m | | 3420 | 3319 | 3799 |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 21.5 | 17.1 | 16.4 |
| | Base Number (BN) | | | | 6.3 | 8.9 | 8.3 |
| | Vine @ 100°C | 0°+ | | 11 | 10.0 | 10.0 | 10.6 |

Visc @ 100°C cSt

12.6

12.8

12.9

ASTM D445 14

