

WEAR NORMAL CONTAMINATION **ABNORMAL** NORMAL **FLUID CONDITION**

Store 9 - Marietta WGH0H235PHAA00660

Component Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|----------------------|----------|----------------------------|-------------|-------------|-------------|----------|
| Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. | Sample Number | | Client Info | | LEC0042165 | LEC0005268 | |
| | Sample Date | | Client Info | | 21 Dec 2023 | 23 Oct 2019 | |
| | Machine Age | hrs | Client Info | | 1014 | 469 | |
| | Oil Age | hrs | Client Info | | 514 | 469 | |
| | Filter Age | hrs | Client Info | | 514 | 469 | |
| | Oil Changed | | Client Info | | Changed | Changed | |
| | Filter Changed | | Client Info | | Changed | Changed | |
| | Sample Status | | | | ABNORMAL | NORMAL | |
| WEAR | Iron | ppm | ASTM D5185m | <u>\100</u> | 57 | 44 | |
| WEAN | Chromium | ppm | ASTM D5185m | | 3 | 4 | |
| All component wear rates are normal. | Nickel | ppm | ASTM D5185m | | -3 -<1 | <1 | |
| | Titanium | ppm | ASTM D5185m | 24 | <1 | 0 | |
| | Silver | ppm | ASTM D5185m | <u>\</u> 3 | 0 | 0 | |
| | Aluminum | ppm | ASTM D5185m | | 6 | 4 | |
| | Lead | ppm | ASTM D5185m | | ہ <1 | 0 | |
| | Copper | ppm | ASTM D5185m | | 7 | 12 | |
| | Tin | ppm | ASTM D5185m | | , <1 | 1 | |
| | Vanadium | ppm | ASTM D5185m | 210 | <1 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| | | 304141 | Visual | NONE | | NONE | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >!20 | 4 26 | 36 | |
| Elemental level of silicon (Si) above normal indicating ingress of seal material. | Potassium | ppm | ASTM D5185m | >20 | 2 | 6 | |
| | Fuel | | WC Method | >5 | <1.0 | <1.0 | |
| | Water | | WC Method | >0.2 | NEG | NEG | |
| | Glycol | | WC Method | | NEG | NEG | |
| | Soot % | % | *ASTM D7844 | >3 | 0.3 | 0.2 | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 9.1 | 7.5 | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 22.8 | 19.5 | |
| | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | Debris | scalar | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| | Odor | scalar | *Visual | NORML | NORML | NORML | |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | |
| | | | | | • | 0 | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m ASTM D5185m | 0 | 3 | 6 | |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Boron Barium | ppm | | | 154 | 97 | |
| | | ppm | ASTM D5185m | | <1 242 | 0 | |
| | Molybdenum | ppm | ASTM D5185m ASTM D5185m | 0 | 243 | 80 4 | |
| | Manganese | ppm | ASTM D5185m | 0 | 1 816 | 4 581 | |
| | Magnesium Calcium | ppm | ASTM D5185m ASTM D5185m | 0 | 1522 | 1813 | |
| | | ppm | ASTM D5185m ASTM D5185m | | | 1094 | |
| | Phosphorus Zinc | ppm | ASTM D5185m | | 912 1143 | 1315 | |
| | Sulfur | ppm | ASTM D5185m | | | 3834 | |
| | Sullui | ppm | ASTIVI DOTOOIII | | 3118 | 3034 | |

Oxidation

Visc @ 100°C cSt

17.9

8.0

13.5

15.6

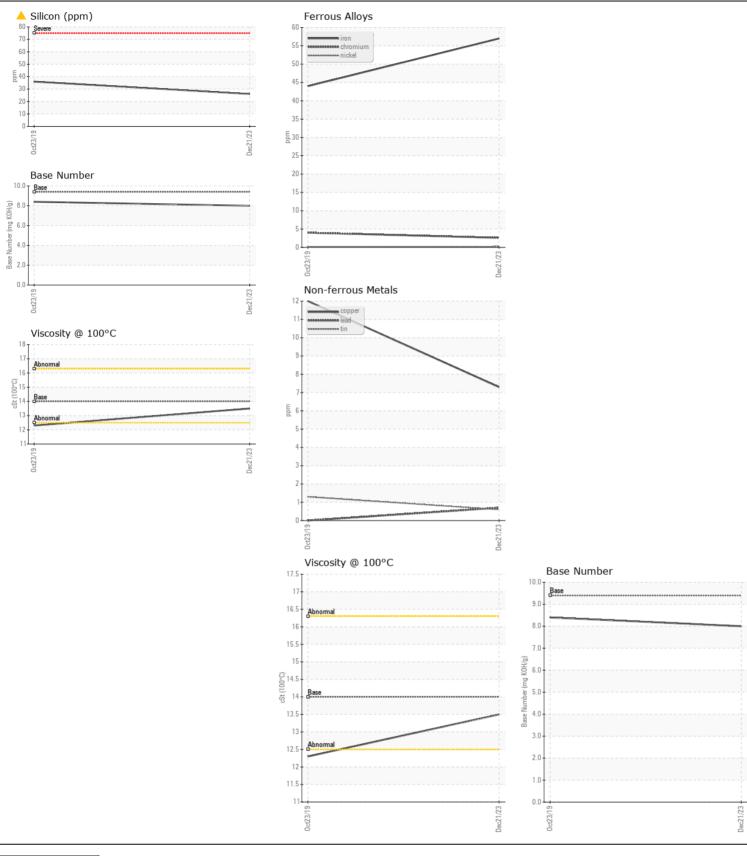
8.4

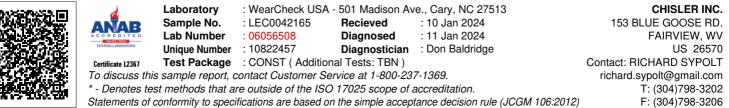
12.3

Base Number (BN) mg KOH/g ASTM D2896 9.4

Abs/.1mm *ASTM D7414 >25

ASTM D445 14





Ē

Submitted By: STORE 9 - MARIETTA - LEANNE KENDALL