

Machine Id

## **MASSEY FERGUSEN MASSEY FERGUSEN 85-265 Diesel Engine** DURALENE Dura-Max 15W40 (--- GAL) RECOMMENDATION Test LIOM Method 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. WEAR The lead level is abnormal. All other component wear rates are normal.

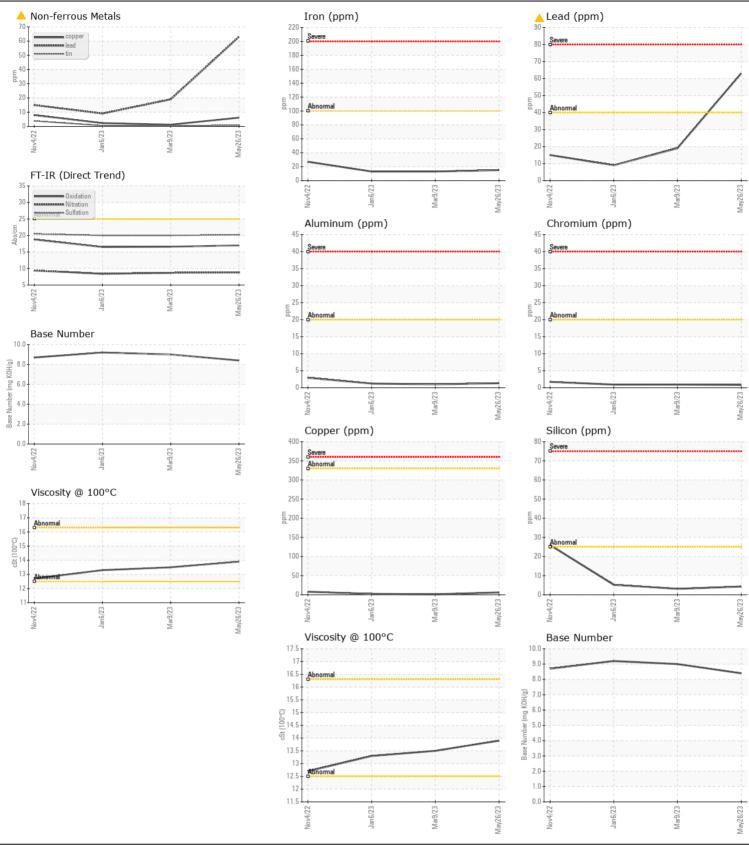
## CONTAMINATION

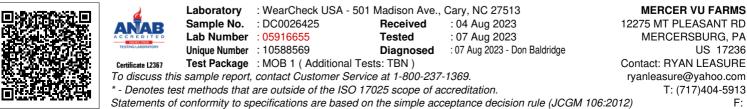
There is no indication of any contamination in the oil.

## **FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test                                  | UOM          | Method                     | Limit/Abn  | Current     | History1    | History2    |
|---------------------------------------|--------------|----------------------------|------------|-------------|-------------|-------------|
| Sample Number                         |              | Client Info                |            | DC0026425   | DC0020476   | DC0020482   |
| Sample Date                           |              | Client Info                |            | 26 May 2023 | 09 Mar 2023 | 06 Jan 2023 |
| Machine Age                           | hrs          | Client Info                |            | 2603        | 1941        | 1289        |
| Oil Age                               | hrs          | Client Info                |            | 662         | 600         | 618         |
| Filter Age                            | hrs          | Client Info                |            | 662         | 600         | 618         |
| Oil Changed                           |              | Client Info                |            | Changed     | Changed     | Changed     |
| Filter Changed                        |              | Client Info                |            | Changed     | Changed     | Changed     |
| Sample Status                         |              |                            |            | ABNORMAL    | NORMAL      | NORMAL      |
| · · · · · · · · · · · · · · · · · · · |              |                            |            |             |             |             |
| Iron                                  | ppm          | ASTM D5185m                | >100       | 15          | 13          | 13          |
| Chromium                              | ppm          | ASTM D5185m                | >20        | <1          | <1          | <1          |
| Nickel                                | ppm          | ASTM D5185m                | >4         | 0           | 0           | 0           |
| Titanium                              | ppm          | ASTM D5185m                |            | 0           | 0           | 0           |
| Silver                                | ppm          | ASTM D5185m                | >3         | 0           | 0           | <1          |
| Aluminum                              | ppm          | ASTM D5185m                | >20        | 1           | 1           | 1           |
| Lead                                  | ppm          | ASTM D5185m                | >40        | <b>6</b> 3  | 19          | 9           |
| Copper                                | ppm          | ASTM D5185m                | >330       | 6           | 1           | 2           |
| Tin                                   | ppm          | ASTM D5185m                | >15        | <1          | <1          | <1          |
| Vanadium                              | ppm          | ASTM D5185m                |            | 0           | 0           | 0           |
| White Metal                           | scalar       | *Visual                    | NONE       | NONE        | NONE        | NONE        |
| Yellow Metal                          | scalar       | *Visual                    | NONE       | NONE        | NONE        | NONE        |
| Silioon                               |              |                            | . 0F       | 4           | 0           | E           |
| Silicon                               | ppm          | ASTM D5185m<br>ASTM D5185m | >25<br>>20 | 4<br><1     | 3<br>0      | 5<br>0      |
| Potassium<br>Fuel                     | ppm          | WC Method                  | >20<br>>5  |             | 0<br><1.0   | 0<br><1.0   |
| Water                                 |              | WC Method                  | >0.2       | <1.0<br>NEG | <1.0<br>NEG | <1.0<br>NEG |
|                                       |              | WC Method                  | >0.2       | NEG         | NEG         | NEG         |
| Glycol<br>Soot %                      | %            | *ASTM D7844                | >3         | 0.2         | 0.2         | 0.1         |
| Nitration                             | 70<br>Abs/cm | *ASTM D7644                | >3<br>>20  | 0.2<br>8.8  | 0.2<br>8.7  | 8.4         |
| Sulfation                             | Abs/.1mm     | *ASTM D7624                | >20        | 20.2        | 20.0        | 20.0        |
| 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      | NORE        | NORML       | NORML       |
| Odor                                  | scalar       | *Visual                    | NORML      | NORML       | NORML       | NORML       |
| Emulsified Water                      |              | *Visual                    | >0.2       | NEG         | NEG         | NEG         |
|                                       | Scalai       | visual                     | 20.2       |             | NLG         | NLG         |
| Sodium                                | ppm          | ASTM D5185m                |            | 1           | 2           | 2           |
| Boron                                 | ppm          | ASTM D5185m                |            | 8           | 4           | 11          |
| Barium                                | ppm          | ASTM D5185m                |            | 0           | 0           | 0           |
| Molybdenum                            | ppm          | ASTM D5185m                |            | 66          | 60          | 60          |
| Manganese                             | ppm          | ASTM D5185m                |            | <1          | 0           | <1          |
| Magnesium                             | ppm          | ASTM D5185m                |            | 1005        | 958         | 920         |
| Calcium                               | ppm          | ASTM D5185m                |            | 1388        | 1278        | 1342        |
| Phosphorus                            | ppm          | ASTM D5185m                |            | 1127        | 1084        | 1041        |
| Zinc                                  | ppm          | ASTM D5185m                |            | 1442        | 1306        | 1270        |
| Sulfur                                | ppm          | ASTM D5185m                |            | 3989        | 3866        | 3755        |
| Oxidation                             | Abs/.1mm     | *ASTM D7414                | >25        | 17.0        | 16.6        | 16.5        |
| Base Number (BN)                      | mg KOH/g     | ASTM D2896                 |            | 8.4         | 9.0         | 9.2         |
| Visc @ 100°C                          | cSt          | ASTM D445                  |            | 13.9        | 13.5        | 13.3        |
|                                       |              |                            |            | $\sim$      |             |             |





Contact/Location: RYAN LEASURE - MERMERPA Page 2 of 2