

## Machine Id G55 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

|  | lo corrective action is recommended at this time. Resample at the   | S |  |  |  |
|--|---|---|--|--|--|
|  | next service interval to monitor. Please specify the component make<br>and model with your next sample. Please specify the brand, type, and | N |  |  |  |
|  | viscosity of the oil on your next sample.   | С |  |  |  |
|  | ,   | E |  |  |  |

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All component wear rates are normal.

RECOMMENDATION

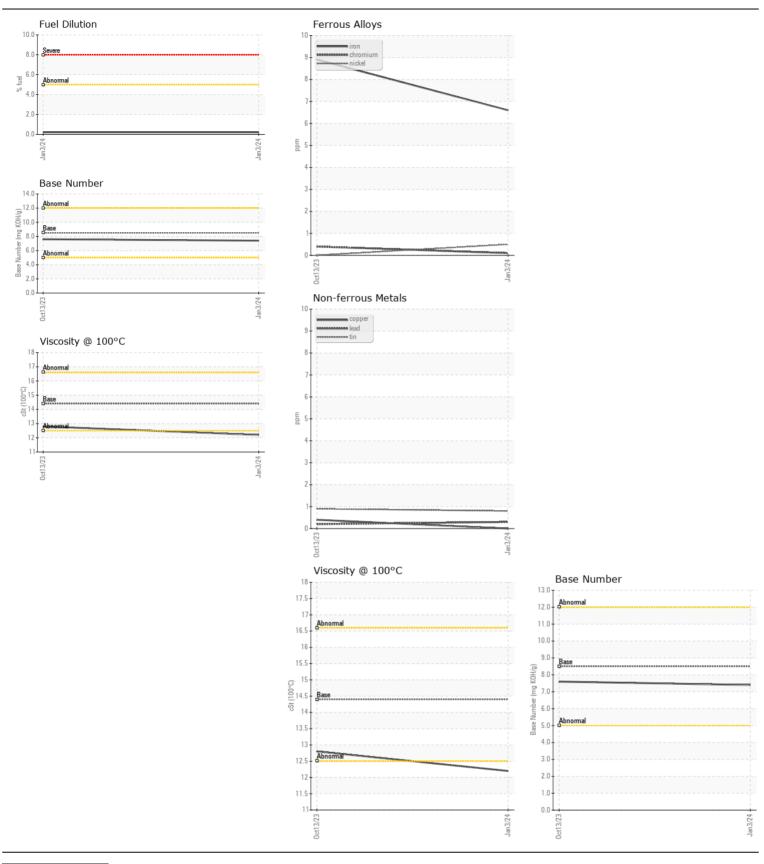
## CONTAMINATION

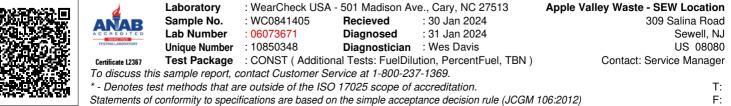
Fuel content negligible. There is no indication of any contamination in the oil.

## **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 |           | WC0841405   | WC0841468   |          |
| Sample Date      |          | Client Info |           | 03 Jan 2024 | 13 Oct 2023 |          |
| Machine Age      | hrs      | Client Info |           | 15710       | 15127       |          |
| Oil Age          | hrs      | Client Info |           | 583         | 555         |          |
| Filter Age       | hrs      | Client Info |           | 583         | 555         |          |
| Oil Changed      |          | Client Info |           | Changed     | Changed     |          |
| Filter Changed   |          | Client Info |           | Changed     | Changed     |          |
| Sample Status    |          |             |           | NORMAL      | NORMAL      |          |
|                  |          |             |           |             |             |          |
| Iron             | ppm      | ASTM D5185m | >100      | 7           | 9           |          |
| Chromium         | ppm      | ASTM D5185m | >20       | <1          | <1          |          |
| Nickel           | ppm      | ASTM D5185m | >4        | <1          | 0           |          |
| Titanium         | ppm      | ASTM D5185m |           | 0           | 0           |          |
| Silver           | ppm      | ASTM D5185m | >3        | <1          | <1          |          |
| Aluminum         | ppm      | ASTM D5185m | >20       | 2           | 1           |          |
| Lead             | ppm      | ASTM D5185m | >40       | <1          | <1          |          |
| Copper           | ppm      | ASTM D5185m | >330      | 0           | <1          |          |
| Tin              | ppm      | ASTM D5185m | >15       | <1          | <1          |          |
| Vanadium         | ppm      | ASTM D5185m |           | 0           | 0           |          |
| White Metal      | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
| Yellow Metal     | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
|                  | Joanar   |             |           |             |             |          |
| Silicon          | ppm      | ASTM D5185m | >25       | 4           | 5           |          |
| Potassium        | ppm      | ASTM D5185m | >20       | <1          | 2           |          |
| Fuel             | %        | ASTM D3524  | >5        | 0.2         | <1.0        |          |
| Water            |          | WC Method   | >0.2      | NEG         | NEG         |          |
| Glycol           |          | WC Method   |           | NEG         | NEG         |          |
| Soot %           | %        | *ASTM D7844 | >3        | 0.4         | 0.5         |          |
| Nitration        | Abs/cm   | *ASTM D7624 | >20       | 7.7         | 8.0         |          |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30       | 19.1        | 20.1        |          |
| 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         |          |
|                  |          |             |           |             |             |          |
| Sodium           | ppm      | ASTM D5185m | >158      | 2           | 2           |          |
| Boron            | ppm      | ASTM D5185m | 250       | 11          | 9           |          |
| Barium           | ppm      | ASTM D5185m | 10        | 0           | 0           |          |
| Molybdenum       | ppm      | ASTM D5185m | 100       | 70          | 64          |          |
| Manganese        | ppm      | ASTM D5185m |           | <1          | <1          |          |
| Magnesium        | ppm      | ASTM D5185m | 450       | 839         | 857         |          |
| Calcium          | ppm      | ASTM D5185m | 3000      | 1081        | 1349        |          |
| Phosphorus       | ppm      | ASTM D5185m | 1150      | 967         | 1038        |          |
| Zinc             | ppm      | ASTM D5185m | 1350      | 1185        | 1359        |          |
| Sulfur           | ppm      | ASTM D5185m | 4250      | 2830        | 3274        |          |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25       | 14.5        | 15.5        |          |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 8.5       | 7.4         | 7.6         |          |
| Visc @ 100°C     | cSt      | ASTM D445   | 14.4      | 12.2        | 12.8        |          |





Contact/Location: Service Manager - AVWSEW