

# **OIL ANALYSIS REPORT**

# Sample Rating Trend



NORMAL

Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

Westchester des 10 doosan light towers 495831uiadg79

Machine Id

Component **Diesel Engine** 

### Recommendation

Resample at the next service interval to monitor.

## Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

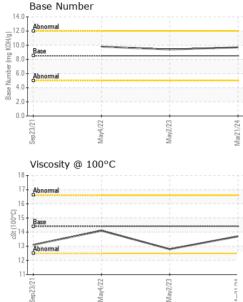
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

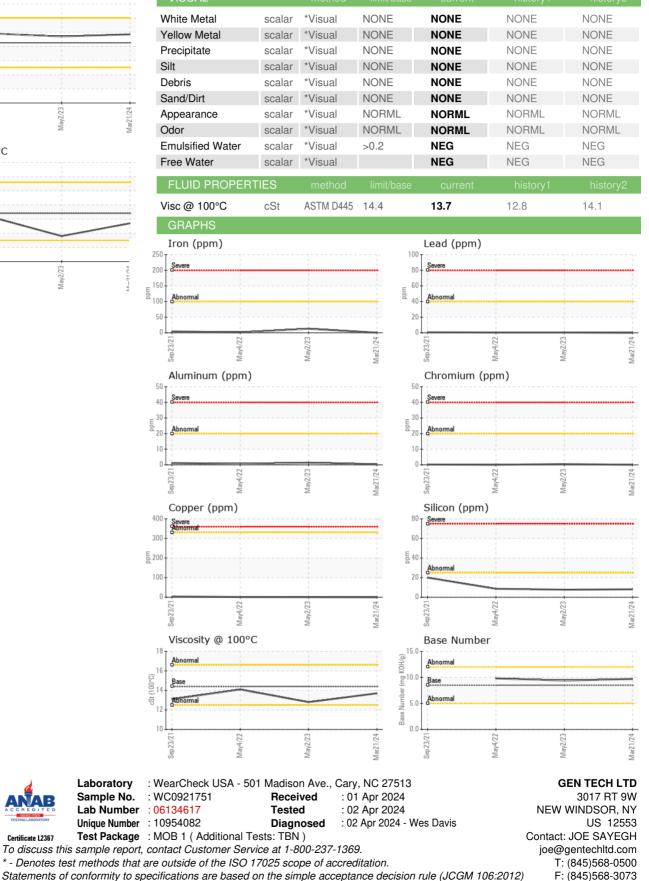
| SAMPLE INFORM    | <b>IATION</b> | method      | limit/base | current                               | history1    | history2    |  |
|------------------|---------------|-------------|------------|---------------------------------------|-------------|-------------|--|
| Sample Number    |               | Client Info |            | WC0921751                             | WC0799916   | WC0651399   |  |
| Sample Date      |               | Client Info |            | 21 Mar 2024                           | 02 May 2023 | 04 May 2022 |  |
| Machine Age      | hrs           | Client Info |            | 23                                    | 17          | 15          |  |
| Oil Age          | hrs           | Client Info |            | 0                                     | 2           | 0           |  |
| Oil Changed      |               | Client Info |            | N/A                                   | Changed     | Changed     |  |
| Sample Status    |               |             |            | NORMAL                                | NORMAL      | NORMAL      |  |
| CONTAMINATIO     | N             | method      | limit/base | current                               | history1    | history2    |  |
| Fuel             |               | WC Method   | >5         | <1.0                                  | <1.0        | <1.0        |  |
| Water            |               | WC Method   | >0.2       | NEG                                   | NEG         | NEG         |  |
| Glycol           |               | WC Method   |            | NEG                                   | NEG         | NEG         |  |
| WEAR METALS      |               | method      | limit/base | current                               | history1    | history2    |  |
| Iron             | ppm           | ASTM D5185m | >100       | <1                                    | 13          | 1           |  |
| Chromium         | ppm           | ASTM D5185m | >20        | 0                                     | <1          | 0           |  |
| Nickel           | ppm           | ASTM D5185m | >4         | 0                                     | <1          | 0           |  |
| Titanium         | ppm           | ASTM D5185m |            | 0                                     | <1          | 0           |  |
| Silver           | ppm           | ASTM D5185m | >3         | 0                                     | 0           | <1          |  |
| Aluminum         | ppm           | ASTM D5185m | >20        | <1                                    | 1           | <1          |  |
| Lead             | ppm           | ASTM D5185m | >40        | 0                                     | <1          | <1          |  |
| Copper           | ppm           | ASTM D5185m | >330       | 0                                     | <1          | 1           |  |
| Tin              | ppm           | ASTM D5185m | >15        | 0                                     | <1          | 0           |  |
| Antimony         | ppm           | ASTM D5185m |            |                                       |             |             |  |
| Vanadium         | ppm           | ASTM D5185m |            | 0                                     | <1          | 0           |  |
| Cadmium          | ppm           | ASTM D5185m |            | 0                                     | 0           | 0           |  |
| ADDITIVES        |               | method      | limit/base | current                               | history1    | history2    |  |
| Boron            | ppm           | ASTM D5185m | 250        | 7                                     | 12          | 9           |  |
| Barium           | ppm           | ASTM D5185m | 10         | 0                                     | 0           | 0           |  |
| Molybdenum       | ppm           | ASTM D5185m | 100        | 65                                    | 53          | 55          |  |
| Manganese        | ppm           | ASTM D5185m |            | 0                                     | <1          | <1          |  |
| Magnesium        | ppm           | ASTM D5185m | 450        | 1029                                  | 814         | 834         |  |
| Calcium          | ppm           | ASTM D5185m | 3000       | 1238                                  | 1318        | 1071        |  |
| Phosphorus       | ppm           | ASTM D5185m | 1150       | 1060                                  | 1021        | 922         |  |
| Zinc             | ppm           | ASTM D5185m | 1350       | 1293                                  | 1282        | 1131        |  |
| Sulfur           | ppm           | ASTM D5185m | 4250       | 4314                                  | 3818        | 3074        |  |
| CONTAMINANTS     |               | method      | limit/base | current                               | history1    | history2    |  |
| Silicon          | ppm           | ASTM D5185m |            | 8                                     | 8           | 9           |  |
| Sodium           | ppm           | ASTM D5185m |            | 0                                     | 1           | <1          |  |
| Potassium        | ppm           | ASTM D5185m | >20        | 2                                     | 6           | 0           |  |
| INFRA-RED        |               | method      | limit/base | current                               | history1    | history2    |  |
| Soot %           | %             | *ASTM D7844 |            | 0                                     | 0.1         | 0.1         |  |
| Nitration        | Abs/cm        | *ASTM D7624 |            | 4.5                                   | 5.0         | 4.5         |  |
| Sulfation        | Abs/.1mm      | *ASTM D7415 | >30        | 16.9                                  | 16.9        | 17.0        |  |
| FLUID DEGRADA    | TION          | method      | limit/base | current                               | history1    | history2    |  |
| Oxidation        | Abs/.1mm      | *ASTM D7414 | >25        | 12.8                                  | 12.5        | 12.5        |  |
| Base Number (BN) | mg KOH/g      | ASTM D2896  | 8.5        | 9.7                                   | 9.4         | 9.8         |  |
| 5:04:09) Bev: 1  |               |             |            | Contact/Location: JOE SAYEGH - GENNEW |             |             |  |

Contact/Location: JOE SAYEGH - GENNEW



# **OIL ANALYSIS REPORT**





Certificate L2367

Contact/Location: JOE SAYEGH - GENNEW