



# OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Machine Id  
**EASG1014317**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 30 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.  
Please specify the component make and model with your next sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0868917</b>   | WC0731388   | WC0614768   |
| Sample Date    |     | Client Info |           | <b>20 Dec 2023</b> | 02 Nov 2022 | 01 Nov 2021 |
| Machine Age    | hrs | Client Info |           | <b>6353</b>        | 4942        | 3378        |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 4942        | 0           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 4942        | 0           |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | N/A         |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | MARGINAL    | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >100 | <b>7</b>     | 12   | 15   |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>0</b>     | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >4   | <b>&lt;1</b> | 0    | <1   |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | 2    |
| Silver       | ppm    | ASTM D5185m | >3   | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >20  | <b>3</b>     | 2    | 3    |
| Lead         | ppm    | ASTM D5185m | >40  | <b>1</b>     | 0    | <1   |
| Copper       | ppm    | ASTM D5185m | >330 | <b>2</b>     | 3    | 5    |
| Tin          | ppm    | ASTM D5185m | >15  | <b>&lt;1</b> | <1   | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0    | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

## CONTAMINATION

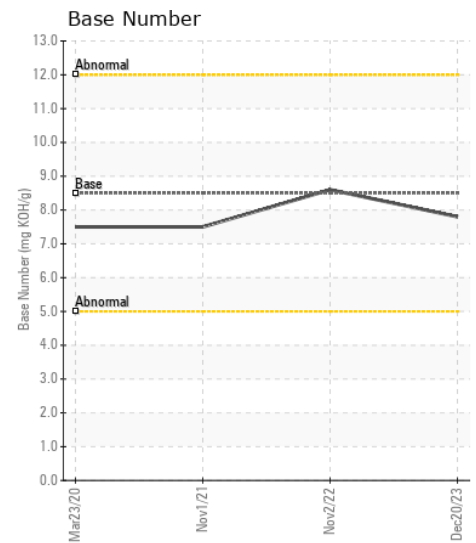
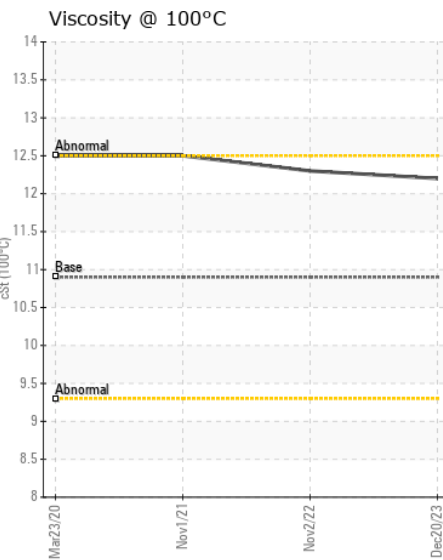
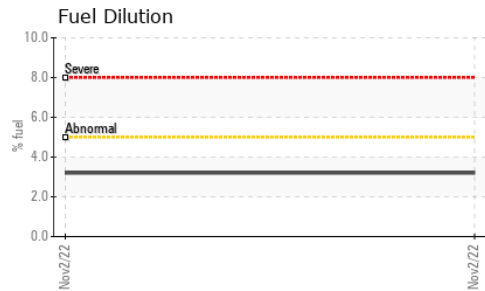
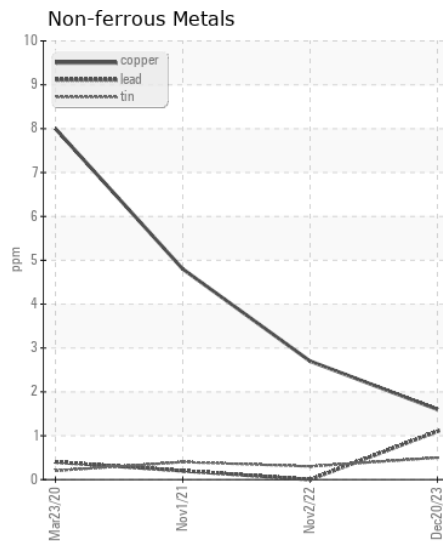
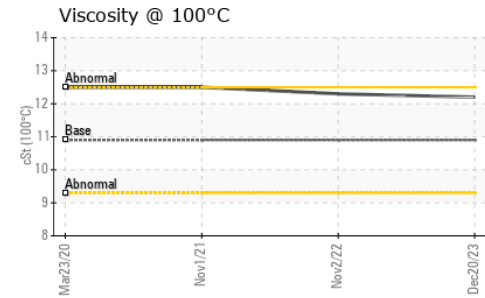
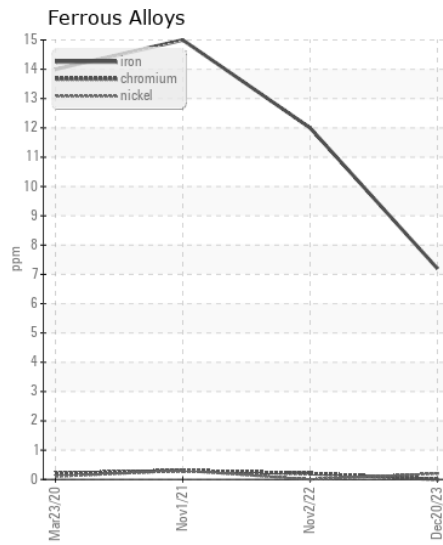
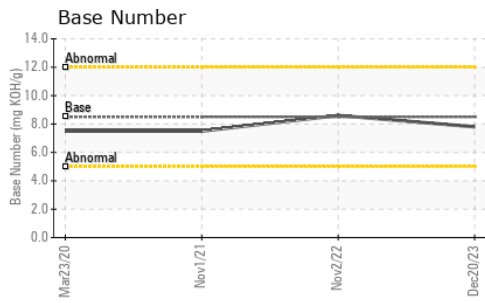
There is no indication of any contamination in the oil.

|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>4</b>       | 4     | 4     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>1</b>       | 0     | 1     |
| Fuel             | %        | ASTM D3524  | >5    | <b>&lt;1.0</b> | ▲ 3.2 | <1.0  |
| Water            |          | WC Method   | >0.2  | <b>NEG</b>     | NEG   | NEG   |
| Glycol           |          | WC Method   |       | <b>NEG</b>     | NEG   | NEG   |
| Soot %           | %        | *ASTM D7844 | >3    | <b>0.2</b>     | 0.2   | 0.2   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>7.3</b>     | 7.7   | 8.5   |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>20.7</b>    | 22.2  | 21.4  |
| Silt             | scalar   | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE  |
| Debris           | scalar   | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE  |
| Sand/Dirt        | scalar   | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE  |
| Appearance       | scalar   | *Visual     | NORML | <b>NORML</b>   | NORML | NORML |
| Odor             | scalar   | *Visual     | NORML | <b>NORML</b>   | NORML | NORML |
| Emulsified Water | scalar   | *Visual     | >0.2  | <b>NEG</b>     | NEG   | NEG   |

## 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.

|                  |          |             |      |              |      |      |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium           | ppm      | ASTM D5185m | >75  | <b>2</b>     | <1   | 2    |
| Boron            | ppm      | ASTM D5185m | 250  | <b>301</b>   | 310  | 240  |
| Barium           | ppm      | ASTM D5185m | 10   | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m | 100  | <b>79</b>    | 81   | 98   |
| Manganese        | ppm      | ASTM D5185m |      | <b>&lt;1</b> | <1   | <1   |
| Magnesium        | ppm      | ASTM D5185m | 450  | <b>366</b>   | 410  | 559  |
| Calcium          | ppm      | ASTM D5185m | 3000 | <b>1695</b>  | 1438 | 1625 |
| Phosphorus       | ppm      | ASTM D5185m | 1150 | <b>984</b>   | 962  | 780  |
| Zinc             | ppm      | ASTM D5185m | 1350 | <b>1221</b>  | 1087 | 913  |
| Sulfur           | ppm      | ASTM D5185m | 4250 | <b>3107</b>  | 3630 | 2676 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>15.2</b>  | 16.7 | 17.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 8.5  | <b>7.8</b>   | 8.6  | 7.5  |
| Visc @ 100°C     | cSt      | ASTM D445   | 10.9 | <b>12.2</b>  | 12.3 | 12.5 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0868917

**Lab Number** : 06099711

**Unique Number** : 10897941

**Test Package** : FLEET ( Additional Tests: FuelDilution )

**Received** : 26 Feb 2024

**Tested** : 27 Feb 2024

**Diagnosed** : 27 Feb 2024 - Wes Davis

**DOLE FRESH FRUIT**

PO BOX 725, ATTN: MAINTENANCE AND REPAIR

NEW CASTLE, DE

US 19720

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)