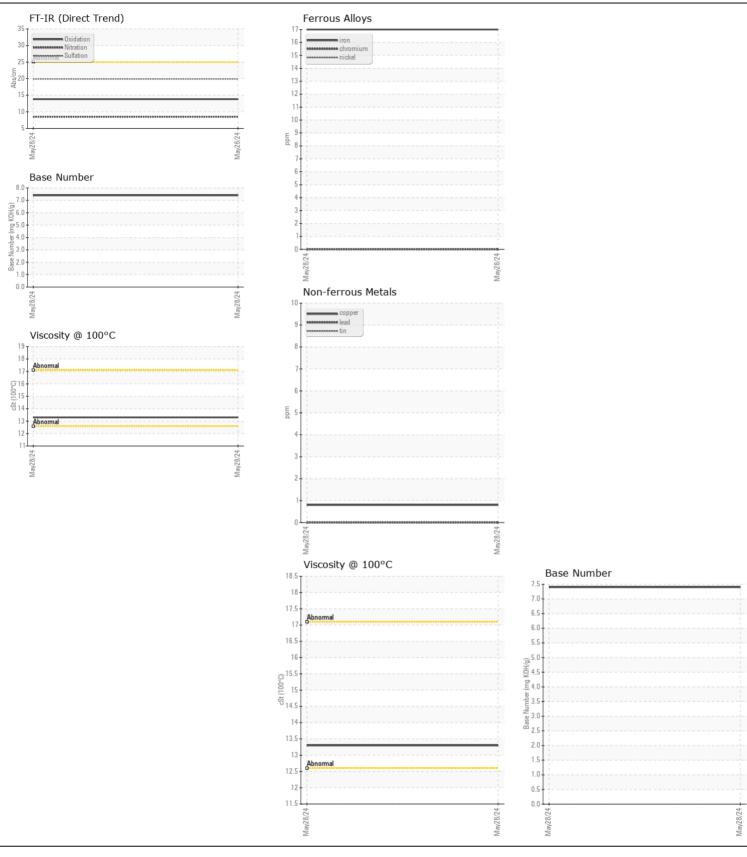
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

Machine Id **V989** 

Component Diesel Engine

| ECOMMENDATION   | Test             | UOM           | Method      | Limit/Abn      | Current     | History1 | History |
|---|------------------|---------------|-------------|----------------|-------------|----------|---------|
| Resample at the next service interval to monitor. Please specify the component make and model with your next sample.  | Sample Number    |               | Client Info |                | PCA0120944  |          |         |
|   | Sample Date      |               | Client Info |                | 28 May 2024 |          |         |
|   | Machine Age      | mls           | Client Info |                | 346309      |          |         |
|   | Oil Age          | mls           | Client Info |                | 20773       |          |         |
|   | Filter Age       | mls           | Client Info |                | 20773       |          |         |
|   | Oil Changed      |               | Client Info |                | Changed     |          |         |
|   | Filter Changed   |               | Client Info |                | Changed     |          |         |
|   | Sample Status    |               |             |                | NORMAL      |          |         |
| /EAR  | Iron             | ppm           | ASTM D5185m | <b>&gt;100</b> | 17          |          |         |
| WLAN  | Chromium         |               | ASTM D5185m |                | 0           |          |         |
| All component wear rates are normal.  | Nickel           | ppm           | ASTM D5185m |                | 0           |          |         |
|   | Titanium         | ppm           | ASTM D5185m | >4             | 2           |          |         |
|   | Silver           | ppm           | ASTM D5185m | . 3            | 0           |          |         |
|   | Aluminum         | ppm           | ASTM D5185m |                | 2           |          |         |
|   | Lead             | ppm           | ASTM D5185m | >40            | 0           |          |         |
|   | Copper           | ppm           | ASTM D5185m |                | <1          |          |         |
|   | Tin              | ppm           | ASTM D5185m |                | 0           |          |         |
|   | Vanadium         | ppm           | ASTM D5185m | >10            | 0           |          |         |
|   | White Metal      | ppm<br>scalar | *Visual     | NONE           | NONE        |          |         |
|   | Yellow Metal     | scalar        | *Visual     | NONE           | NONE        |          |         |
|   |                  |               |             |                |             |          |         |
| ONTAMINATION  | Silicon          | ppm           | ASTM D5185m |                | 7           |          |         |
| Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil. | Potassium        | ppm           | ASTM D5185m |                | 3           |          |         |
|   | Fuel             |               | WC Method   |                | <1.0        |          |         |
|   | Water            |               | WC Method   | >0.2           | NEG         |          |         |
|   | Glycol           |               | WC Method   |                | NEG         |          |         |
|   | Soot %           | %             | *ASTM D7844 | >3             | 1.2         |          |         |
|   | Nitration        | Abs/cm        | *ASTM D7624 | >20            | 8.5         |          |         |
|   | Sulfation        | Abs/.1mm      | *ASTM D7415 |                | 19.9        |          |         |
|   | Silt             | scalar        | *Visual     | NONE           | NONE        |          |         |
|   | Debris           | scalar        | *Visual     | NONE           | NONE        |          |         |
|   | Sand/Dirt        | scalar        | *Visual     | NONE           | NONE        |          |         |
|   | Appearance       | scalar        | *Visual     | NORML          | NORML       |          |         |
|   | Odor             | scalar        | *Visual     | NORML          | NORML       |          |         |
|   | Emulsified Water | scalar        | *Visual     | >0.2           | NEG         |          |         |
| FLUID CONDITION   | Sodium           | ppm           | ASTM D5185m |                | 1           |          |         |
|   | Boron            | ppm           | ASTM D5185m |                | 8           |          |         |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.   | Barium           | ppm           | ASTM D5185m |                | 0           |          |         |
|   | Molybdenum       | ppm           | ASTM D5185m |                | 60          |          |         |
|   | Manganese        | ppm           | ASTM D5185m |                | 0           |          |         |
|   | Magnesium        | ppm           | ASTM D5185m |                | 1057        |          |         |
|   | Calcium          | ppm           | ASTM D5185m |                | 1280        |          |         |
|   | Phosphorus       | ppm           | ASTM D5185m |                | 1074        |          |         |
|   | Zinc             | ppm           | ASTM D5185m |                | 1367        |          |         |
|   | Sulfur           | ppm           | ASTM D5185m |                | 3742        |          |         |
|   | Oxidation        | Abs/.1mm      | *ASTM D7414 | >25            | 13.8        |          |         |
|   | Base Number (BN) |               |             |                | 7.4         |          |         |
|   | Visc @ 100°C     | cSt           | ASTM D445   |                | 13.3        |          |         |







Certificate L2367

Laboratory

Sample No.

: PCA0120944 Lab Number : 06211299 Unique Number : 11084163 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Jun 2024 **Tested** : 19 Jun 2024

Diagnosed : 19 Jun 2024 - Wes Davis TROIL ENTERPRISES 2485 E STATE RD TRENTON, NJ US 08619 Contact: JOHN RUBLE

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)

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