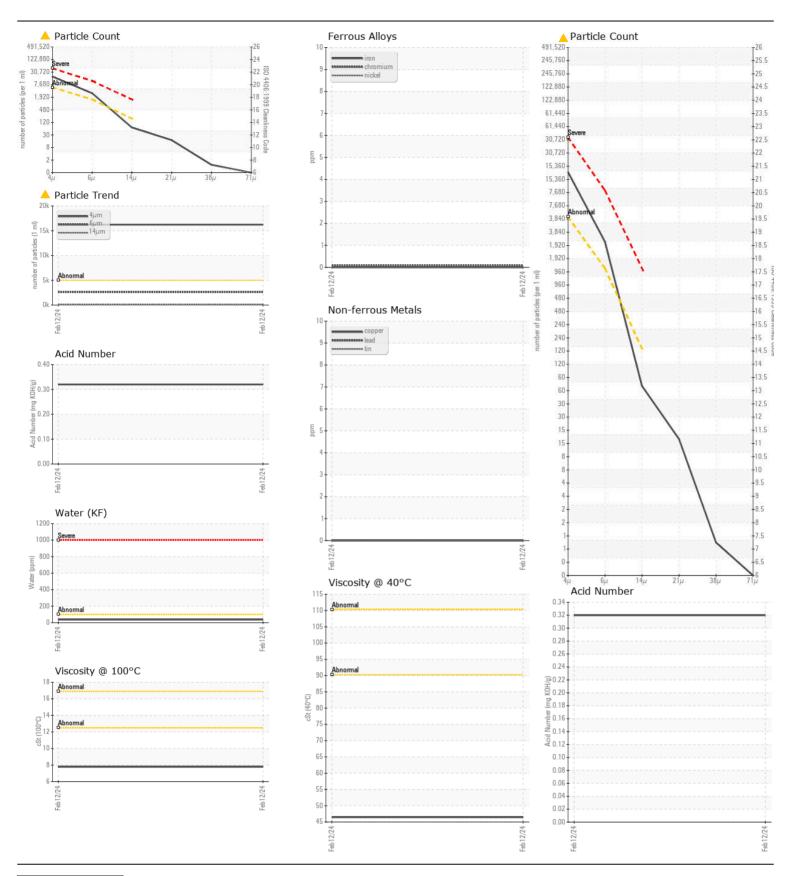
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

## **BATCH 20209 - AW 46**

New (Unused) Oil

| ECOMMENDATION  | Test             | UOM        | Method       | Limit/Abn | Current           | History1 | History |
|--|------------------|------------|--------------|-----------|-------------------|----------|---------|
| This is a baseline read-out on the submitted sample.                                   | Sample Number    |            | Client Info  |           | RP0039790         |          |         |
|  | Sample Date      |            | Client Info  |           | 12 Feb 2024       |          |         |
|  | Machine Age      | hrs        | Client Info  |           | 0                 |          |         |
|  | Oil Age          | hrs        | Client Info  |           | 0                 |          |         |
|  | Filter Age       | hrs        | Client Info  |           | 0                 |          |         |
|  | Oil Changed      |            | Client Info  |           | N/A               |          |         |
|  | Filter Changed   |            | Client Info  |           | N/A               |          |         |
|  | Sample Status    |            |              |           | ABNORMAL          |          |         |
| WEAR   | Iron             | ppm        | ASTM D5185m  | >5        | 0                 |          |         |
|  | Chromium         | ppm        | ASTM D5185m  |           | <1                |          |         |
|  | Nickel           | ppm        | ASTM D5185m  |           | 0                 |          |         |
|  | Titanium         | ppm        | ASTM D5185m  | /0        | 0                 |          |         |
|  | Silver           |            | ASTM D5105m  | <u> </u>  | 0                 |          |         |
|  | Aluminum         | ppm<br>ppm | ASTM D5185m  |           | 0<br><1           |          |         |
|  | Lead             |            | ASTM D5185m  |           | 0                 |          |         |
|  | Copper           | ppm        | ASTM D5185m  |           | 0                 |          |         |
|  | Tin              | ppm        | ASTM D5185m  |           | 0                 |          |         |
|  |                  | ppm        |              | >5        | -                 |          |         |
|  | Vanadium         | ppm        | ASTM D5185m  | NONE      | <1<br>NONE        |          |         |
|  | White Metal      | scalar     | *Visual      | NONE      | NONE              |          |         |
|  | Yellow Metal     | scalar     | *Visual      | NONE      | NONE              |          |         |
| ONTAMINATION   | Silicon          | ppm        | ASTM D5185m  | >15       | <1                |          |         |
|  | Potassium        | ppm        | ASTM D5185m  | >20       | 0                 |          |         |
| There is a high amount of silt (particulates < 14 microns in size) present in the oil. | Water            | %          | ASTM D6304   |           | 0.003             |          |         |
|  | ppm Water        | ppm        | ASTM D6304   |           | 37                |          |         |
|  | Particles >4µm   | 1-1-       | ASTM D7647   | >5000     | <b>▲</b> 16223    |          |         |
|  | Particles >6µm   |            | ASTM D7647   |           | <b>2603</b>       |          |         |
|  | Particles >14μm  |            | ASTM D7647   |           | 60                |          |         |
|  | Particles >21µm  |            | ASTM D7647   |           | 15                |          |         |
|  | Particles >38µm  |            | ASTM D7647   |           | 1                 |          |         |
|  | Particles >71µm  |            | ASTM D7647   |           | 0                 |          |         |
|  | Oil Cleanliness  |            | ISO 4406 (c) | >19/17/14 | <u>^</u> 21/19/13 |          |         |
|  | 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 |            | *Visual      | NOTHIVIL  | NEG               |          |         |
| <u></u>  |                  |            |              |           |                   |          |         |
| FLUID CONDITION  | Sodium           | ppm        | ASTM D5185m  |           | 0                 |          |         |
|  | Boron            | ppm        | ASTM D5185m  |           | 1                 |          |         |
|  | Barium           | ppm        | ASTM D5185m  |           | 0                 |          |         |
|  | Molybdenum       | ppm        | ASTM D5185m  |           | 0                 |          |         |
|  | Manganese        | ppm        | ASTM D5185m  |           | <1                |          |         |
|  | Magnesium        | ppm        | ASTM D5185m  |           | 14                |          |         |
|  | Calcium          | ppm        | ASTM D5185m  |           | 77                |          |         |
|  | Phosphorus       | ppm        | ASTM D5185m  |           | 375               |          |         |
|  | Zinc             | ppm        | ASTM D5185m  |           | 444               |          |         |
|  | Acid Number (AN) |            | ASTM D8045   |           | 0.32              |          |         |
|  | Visc @ 40°C      | cSt        | ASTM D0045   |           | 46.47             |          |         |
|  | Visc @ 40 C      | cSt        | ASTM D445    |           | 7.79              |          |         |
|  |                  |            |              |           |                   |          |         |





Certificate L2367

Laboratory Sample No. Unique Number : 10873920

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RP0039790 Lab Number : 06086475

Received : 12 Feb 2024 **Tested** : 14 Feb 2024 Diagnosed

: 14 Feb 2024 - Jonathan Hester Test Package : IND 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI )

**LUBE PLUS** 15551 W HWY 82 MUENSTER, TX US 76252 Contact: ERNIE BRINKLEY

ernie@lubeplus4u.com

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)

T: F: