

# WEAR NORMAL CONTAMINATION ATTENTION FLUID CONDITION NORMAL

#### Machine Id KBA 7204 Component Gearbox Fluid {not provided} (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is ISO 100 Gear Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

### WEAR

All component wear rates are normal.

## CONTAMINATION

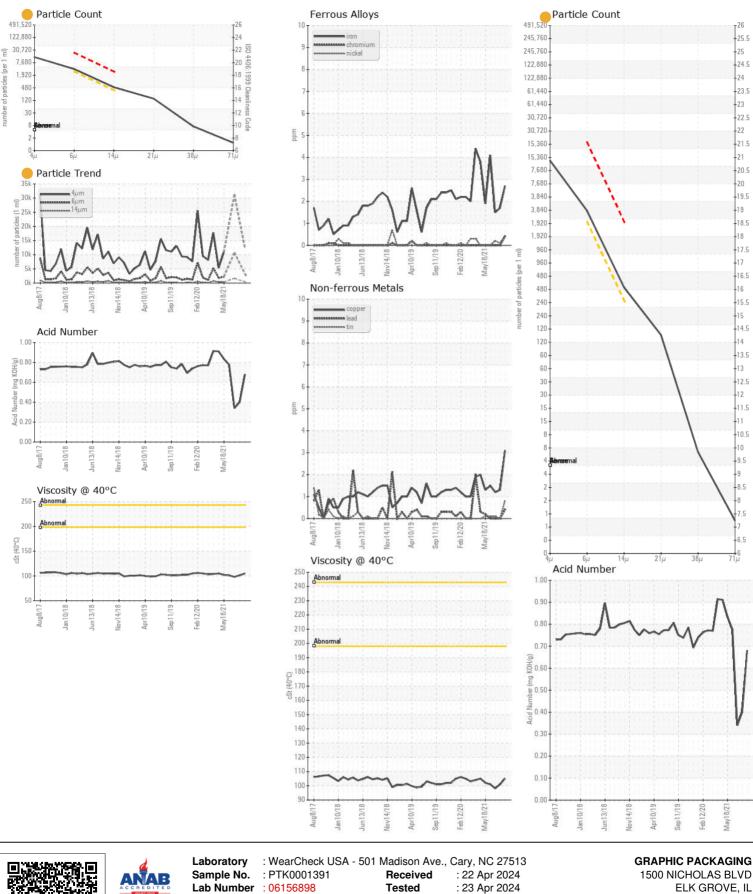
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

#### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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|  | Test                                  | UOM      | Method       | Limit/Abn | Current     | History1    | History2     |
|--|---------------------------------------|----------|--------------|-----------|-------------|-------------|--------------|
|  | Sample Number                         |          | Client Info  |           | PTK0001391  | PTK0001300  | PTK0001284   |
|  | Sample Date                           |          | Client Info  |           | 19 Apr 2024 | 13 Jun 2023 | 23 Nov 2022  |
|  | Machine Age                           | wks      | Client Info  |           | 0           | 0           | 0            |
|  | Oil Age                               | wks      | Client Info  |           | 0           | 0           | 0            |
|  | Filter Age                            | wks      | Client Info  |           | 0           | 0           | 0            |
|  | Oil Changed                           |          | Client Info  |           | N/A         | N/A         | N/A          |
|  | Filter Changed                        |          | Client Info  |           | N/A         | N/A         | N/A          |
|  | Sample Status                         |          |              |           | ATTENTION   | ABNORMAL    | ABNORMAL     |
|  | · · · · · · · · · · · · · · · · · · · |          |              |           |             |             |              |
|  | Iron                                  | ppm      | ASTM D5185m  | >200      | 3           | 2           | 2            |
|  | Chromium                              | ppm      | ASTM D5185m  | >10       | <1          | 0           | 0            |
|  | Nickel                                | ppm      | ASTM D5185m  | >10       | <1          | <1          | <1           |
|  | Titanium                              | ppm      | ASTM D5185m  |           | <1          | 0           | 0            |
|  | Silver                                | ppm      | ASTM D5185m  |           | <1          | 0           | 0            |
|  | Aluminum                              | ppm      | ASTM D5185m  | >25       | 3           | 0           | <1           |
|  | Lead                                  | ppm      | ASTM D5185m  | >50       | <1          | 0           | 0            |
|  | Copper                                | ppm      | ASTM D5185m  | >200      | 3           | 1           | 1            |
|  | Tin                                   | ppm      | ASTM D5185m  | >10       | <1          | 0           | <1           |
|  | Vanadium                              | ppm      | ASTM D5185m  |           | <1          | 0           | 0            |
|  | White Metal                           | scalar   | *Visual      | NONE      | NONE        | NONE        | LIGHT        |
|  | Yellow Metal                          | scalar   | *Visual      | NONE      | NONE        | NONE        | NONE         |
|  |                                       |          |              |           | •           |             |              |
|  | Silicon                               | ppm      | ASTM D5185m  | >50       | 9           | 2           | 3            |
|  | Potassium                             | ppm      | ASTM D5185m  | >20       | 2           | <1          | <1           |
|  | Water                                 |          | WC Method    | >0.2      | NEG         | NEG         | NEG          |
|  | Particles >4µm                        |          | ASTM D7647   | 0.500     | 12309       |             | 31269        |
|  | Particles >6µm                        |          | ASTM D7647   | >2500     | 3311        |             | ▲ 10669      |
|  | Particles >14µm                       |          | ASTM D7647   | >320      | 446         |             | <u> </u>     |
|  | Particles >21µm                       |          | ASTM D7647   | >80       | 128         |             | <b>▲</b> 419 |
|  | Particles >38µm                       |          | ASTM D7647   | >20       | 6           |             | 11           |
|  | Particles >71µm                       |          | ASTM D7647   | >4        | 1           |             | 1            |
|  | Oil Cleanliness                       |          | ISO 4406 (c) | >18/15    | 9/16        |             | ▲ 21/18      |
|  | Silt                                  | scalar   | *Visual      | NONE      | NONE        | NONE        | NONE         |
|  | Debris                                | scalar   | *Visual      | NONE      | LIGHT       | A MODER     | LIGHT        |
|  | Sand/Dirt                             | scalar   | *Visual      | NONE      | NONE        | NONE        | NONE         |
|  | Appearance                            | scalar   | *Visual      | NORML     | NORML       | NORML       | NORML        |
|  | Odor<br>Emulsified Water              | scalar   | *Visual      | NORML     | NORML       | NORML       | NORML        |
|  |                                       | scalar   | *Visual      | >0.2      | NEG         | NEG         | NEG          |
|  | Sodium                                | nom      | ASTM D5185m  |           | 0           | 0           | <1           |
|  | Boron                                 | ppm      | ASTM D5185m  |           | 21          | 5           | <1           |
|  | Barium                                | ppm      | ASTM D5185m  |           | 0           | 5           | 0            |
|  | Molybdenum                            | ppm      | ASTM D5185m  |           | <1          | 0           | 0            |
|  | Manganese                             | ppm      | ASTM D5185m  |           | <1          | <1          | 0            |
|  | Magnesium                             | ppm      | ASTM D5185m  |           | <1          | 6           | <1           |
|  | Calcium                               | ppm      | ASTM D5185m  |           | 0           | 8           | 1            |
|  | Phosphorus                            | ppm      | ASTM D5185m  |           | 321         | 268         | 220          |
|  | Zinc                                  | ppm      | ASTM D5185m  |           | 18          | 85          | 64           |
|  | Sulfur                                | ppm      | ASTM D5185m  |           | 14094       | 10918       | 6985         |
|  | Acid Number (AN)                      | mg KOH/g | ASTM D8045   |           | 0.68        | 0.40        | 0.34         |
|  | Visc @ 40°C                           | cSt      | ASTM D445    |           | 105         | 101         | 98.1         |
|  |                                       |          |              |           |             |             | 0011         |



ELK GROVE, IL : 23 Apr 2024 - Wes Davis US 60017 Diagnosed Test Package : MOB 2 (Additional Tests: PrtCount) Contact: TONY HILDY To discuss this sample report, contact Customer Service at 1-800-237-1369. anthonyhildy@graphicpkg.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (847)437-1700 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Certificate L2367

Unique Number : 10992321

Contact/Location: TONY HILDY - GRAELK Page 2 of 2

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May18/21

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