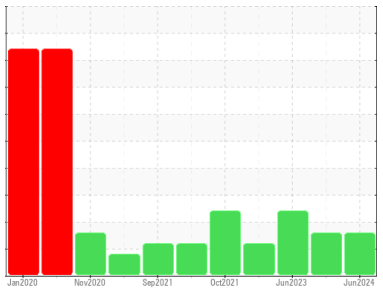
# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Area
## Formulation-FHG
Machine Id
## Sew Euro Drive FHG50CB01 Standardization Tank, Agitator
Component
**Gearbox**
Fluid
**JAX FGG-AW ISO 220 (7 GAL)**

## DIAGNOSIS

**Recommendation**
We recommend you service the filters on this component. Resample at the next service interval to monitor.

**Wear**
All component wear rates are normal.

**Contamination**
There is a high amount of particulates present in the oil.

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0888639** | WC0847257 | WC0793881 |
| Sample Date | | Client Info | | **06 Jun 2024** | 24 Oct 2023 | 15 Jun 2023 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | ABNORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >200 | **174** | 143 | 90 |
| Chromium | ppm | ASTM D5185m | >15 | **2** | 1 | <1 |
| Nickel | ppm | ASTM D5185m | >15 | **<1** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | **2** | 2 | <1 |
| Lead | ppm | ASTM D5185m | >100 | **<1** | <1 | 0 |
| Copper | ppm | ASTM D5185m | >200 | **<1** | <1 | <1 |
| Tin | ppm | ASTM D5185m | >25 | **<1** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | <1 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | | **0** | 2 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **<1** | 0 | <1 |
| Calcium | ppm | ASTM D5185m | | **0** | 1 | 0 |
| Phosphorus | ppm | ASTM D5185m | | **577** | 744 | 592 |
| Zinc | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | **576** | 726 | 637 |

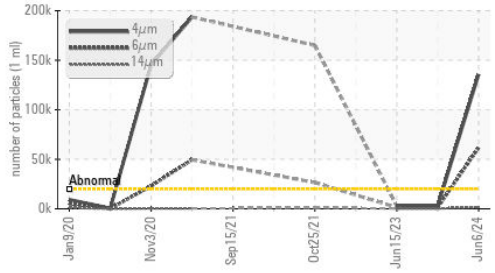
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **4** | 3 | 2 |
| Sodium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 1 | 0 |
| Water | % | ASTM D6304 | >0.2 | **0.051** | ▲ 0.243 | 0.096 |
| ppm Water | ppm | ASTM D6304 | >2000 | **518** | ▲ 2430 | 960 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >20000 | ▲ **135538** | 2627 | 2627 |
| Particles >6µm | | ASTM D7647 | >5000 | ▲ **61709** | 1431 | 1431 |
| Particles >14µm | | ASTM D7647 | >640 | ▲ **1484** | 244 | 244 |
| Particles >21µm | | ASTM D7647 | >160 | **198** | 82 | 82 |
| Particles >38µm | | ASTM D7647 | >40 | **12** | 13 | 13 |
| Particles >71µm | | ASTM D7647 | >10 | **1** | 1 | 1 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | ▲ **24/23/18** | 19/18/15 | 19/18/15 |

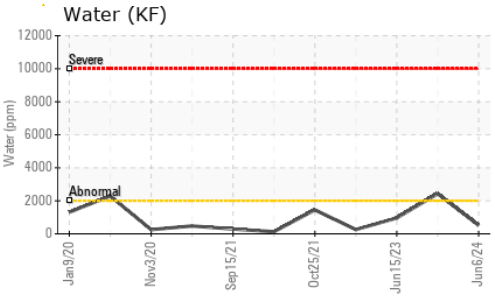
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.54** | 0.59 | 0.61 |

# OIL ANALYSIS REPORT

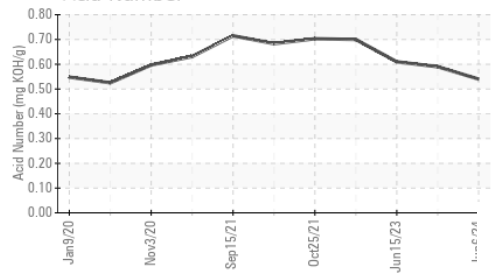
Particle Trend



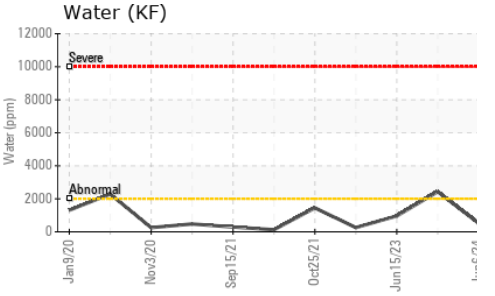

Water (KF)



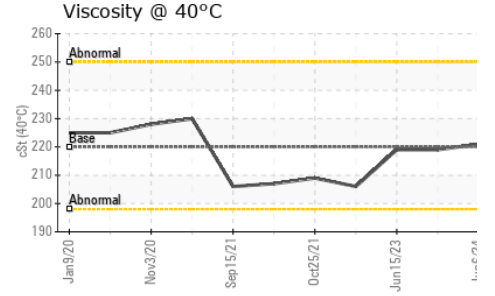

Acid Number




Water (KF)




Viscosity @ 40°C



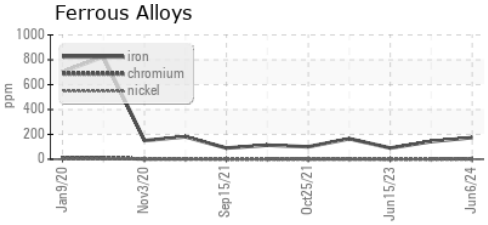

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | ● HAZY |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | **NEG** | 0.2% | 0.2% |
| Free Water | scalar | *Visual | | **NEG** | NEG | ▲ 1.0 |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 220 | **221** | 219 | 219 |

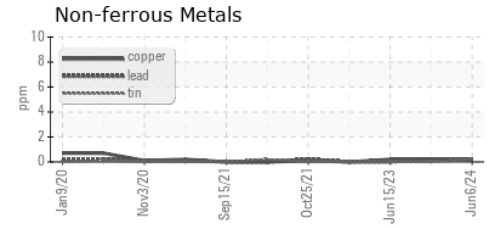
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

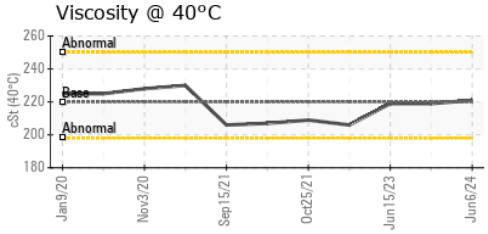
Ferrous Alloys



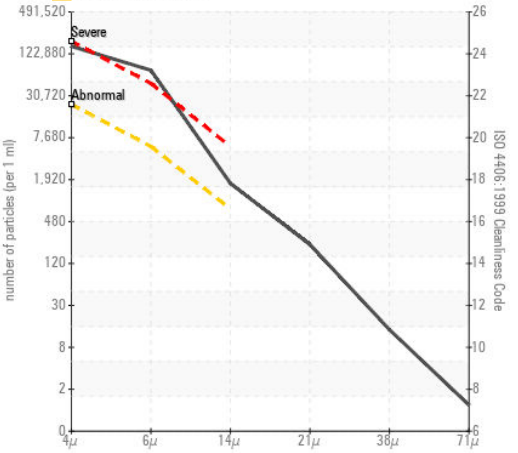

Non-ferrous Metals



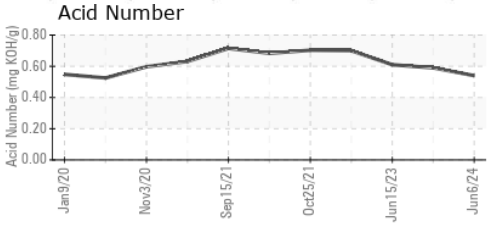

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0888639 **Received** : 12 Jun 2024
**Lab Number** : 06207767 **Tested** : 13 Jun 2024
**Unique Number** : 11075228 **Diagnosed** : 14 Jun 2024 - Angela Borella
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

*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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