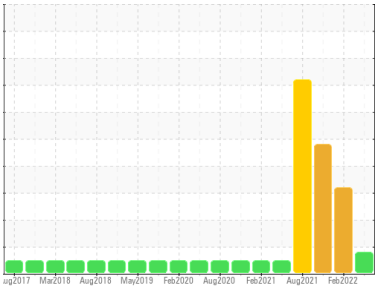
# OIL ANALYSIS REPORT

Sample Rating Trend




**WEAR**

Area
**97**
Machine Id
## [97] A97 Fan 901
Component
**Center Gearbox**
Fluid
**GEAR LIFE 150 (5 GAL)**

## DIAGNOSIS

**Recommendation**
We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor.

**Wear**
An increase in the iron level is noted. Gear wear is indicated.

**Contamination**
There is no indication of any contamination in the oil.

**Fluid Condition**
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **HPL0000172** | HPL0000084 | HPL0000073 |
| Sample Date | | Client Info | | **16 May 2022** | 23 Feb 2022 | 17 Nov 2021 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **2660** | 350 | 200 |
| Oil Changed | | Client Info | | **Not Changd** | Not Changd | Not Changd |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | SEVERE |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.2 | **NEG** | NEG | NEG |

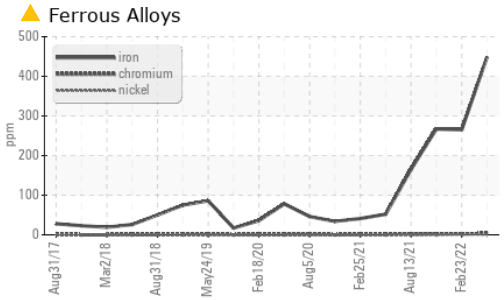
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >200 | ▲ **449** | ▲ 265 | ▲ 267 |
| Chromium | ppm | ASTM D5185m | >10 | **4** | 2 | 2 |
| Nickel | ppm | ASTM D5185m | | **<1** | 2 | <1 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 1 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | **17** | 10 | 11 |
| Lead | ppm | ASTM D5185m | >50 | **7** | 5 | 5 |
| Copper | ppm | ASTM D5185m | >200 | **2** | <1 | <1 |
| Tin | ppm | ASTM D5185m | >10 | **<1** | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | **---** | 18 | 30 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | <1 |

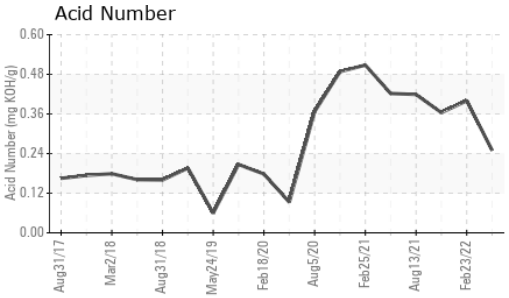
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **2** | <1 | 20 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | **5** | 4 | 3 |
| Magnesium | ppm | ASTM D5185m | | **45** | 28 | 24 |
| Calcium | ppm | ASTM D5185m | | **96** | 62 | 80 |
| Phosphorus | ppm | ASTM D5185m | | **154** | 153 | 146 |
| Zinc | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Sulfur | ppm | ASTM D5185m | | **17938** | 17854 | 19578 |

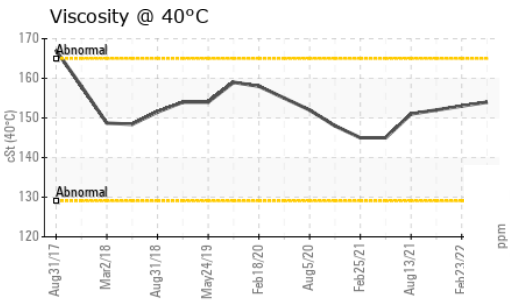
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **44** | 20 | 30 |
| Sodium | ppm | ASTM D5185m | | **13** | 10 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | **3** | 4 | 2 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.25** | 0.40 | 0.364 |

# OIL ANALYSIS REPORT



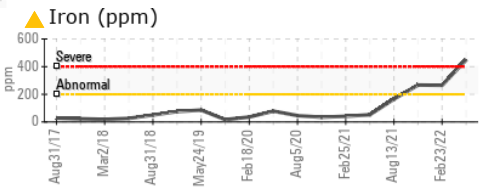



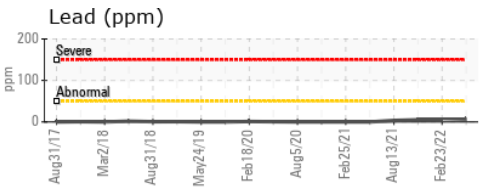

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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** | ▲ MILKY | ▲ MILKY |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | **NEG** | 0.2% | ⬢ 0.2% |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

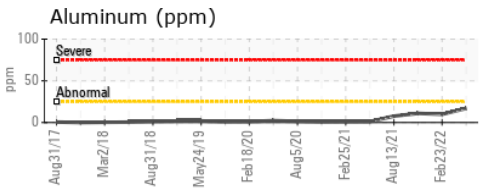
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **154** | 153 | 152 |

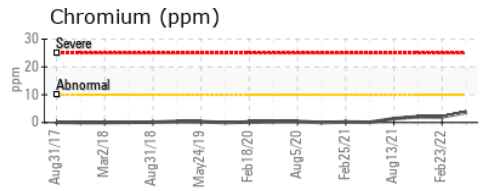
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | *no image* | *no image* | *no image* |
| Bottom | | | *no image* | *no image* | *no image* |

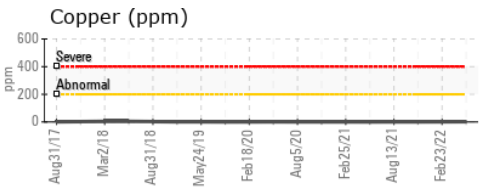
## GRAPHS

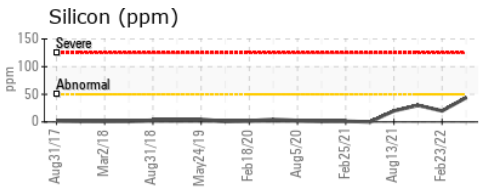


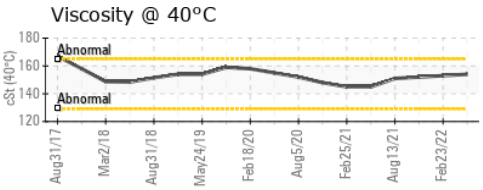



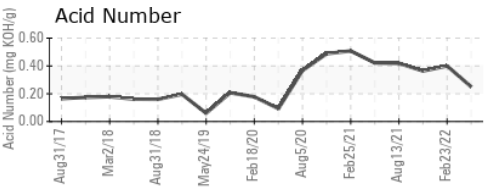




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : HPL0000172 **Recieved** : 19 May 2022
**Lab Number** : 05549251 **Diagnosed** : 20 May 2022
**Unique Number** : 9983618 **Diagnostician** : Angela Borella
**Test Package** : MOB 2

*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)*


**KENSING**
2525 S KENSINGTON RD
KANKAKEE, IL
US 60901
Contact: TIM HUBERT
timothy.hubert@kensingsolutions.com
T: (815)939-8918
F: x: