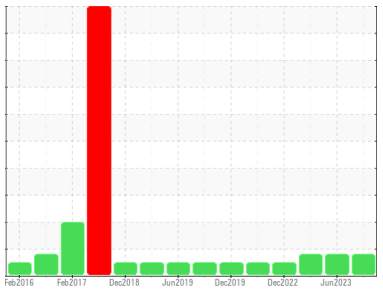
# OIL ANALYSIS REPORT

Sample Rating Trend




**WEAR**

Machine Id
## DRUM 008 (S/N KY004907)
Component
**Gearbox**
Fluid
**7 EP (1 PNT)**

## DIAGNOSIS

**Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**
The iron level has decreased, but is still abnormal. Gear wear is indicated. All other component wear rates are normal.

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

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **RP0037325** | RP0021786 | RP0021788 |
| Sample Date | | Client Info | | **27 Mar 2024** | 28 Jun 2023 | 22 Mar 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 | ▲ **255** | ▲ 352 | 176 |
| Chromium | ppm | ASTM D5185m | >15 | **3** | 3 | 2 |
| Nickel | ppm | ASTM D5185m | >15 | **1** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Silver | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | **1** | <1 | <1 |
| Lead | ppm | ASTM D5185m | >100 | **1** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | **1** | <1 | <1 |
| Tin | ppm | ASTM D5185m | >25 | **1** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **1** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **24** | 25 | 31 |
| Barium | ppm | ASTM D5185m | | **3** | 4 | 3 |
| Molybdenum | ppm | ASTM D5185m | | **1** | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | **3** | 2 | 2 |
| Magnesium | ppm | ASTM D5185m | | **<1** | <1 | 4 |
| Calcium | ppm | ASTM D5185m | | **7** | 1 | 4 |
| Phosphorus | ppm | ASTM D5185m | | **217** | 237 | 257 |
| Zinc | ppm | ASTM D5185m | | **3** | 3 | 4 |

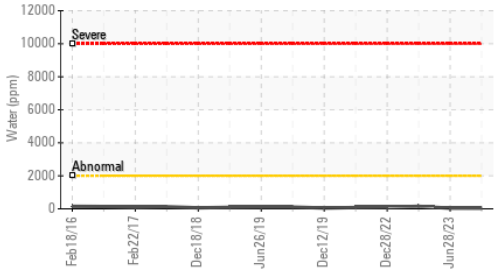
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **3** | 2 | 1 |
| Sodium | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **2** | <1 | <1 |
| Water | % | ASTM D6304 | >0.2 | **0.003** | 0.003 | 0.015 |
| ppm Water | ppm | ASTM D6304 | >2000 | **32** | 36.8 | 151.7 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.58** | 0.57 | 0.48 |

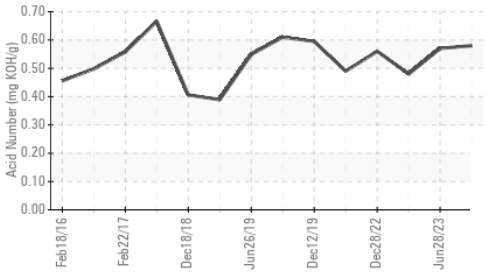
| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
|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

# OIL ANALYSIS REPORT

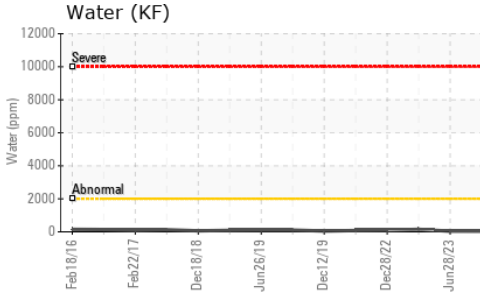
Water (KF)



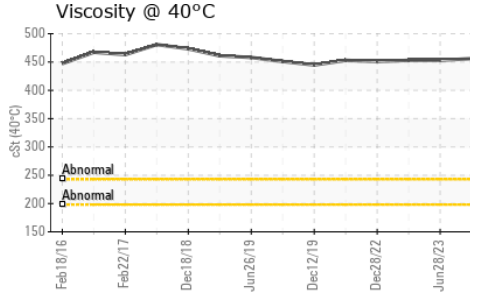

Acid Number




Water (KF)

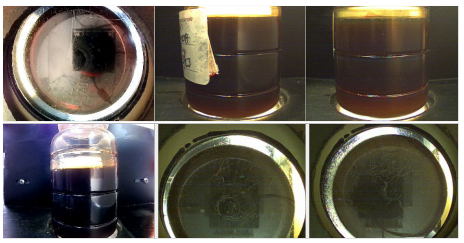



Viscosity @ 40°C



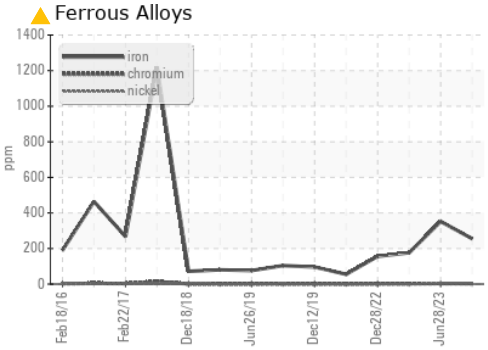

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **456** | 453 | 453 |

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

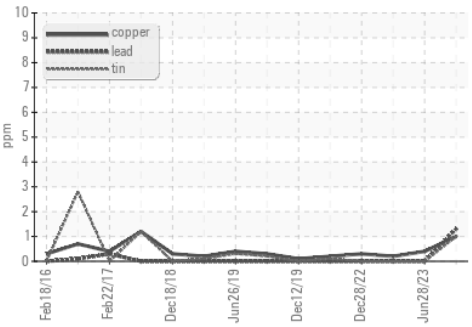


## GRAPHS

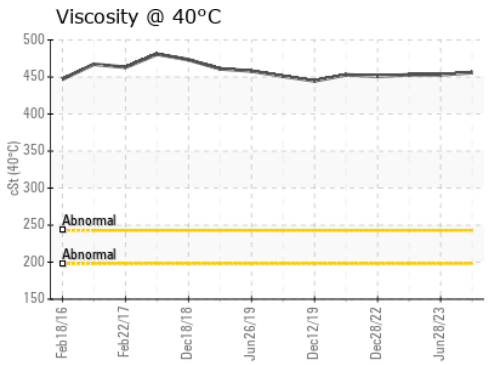
Ferrous Alloys



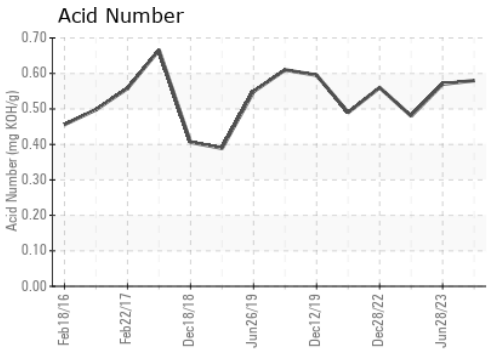

Non-ferrous Metals




Viscosity @ 40°C




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : RP0037325
**Lab Number** : 06145958
**Unique Number** : 10976036
**Test Package** : IND 2

**Received** : 11 Apr 2024
**Tested** : 12 Apr 2024
**Diagnosed** : 15 Apr 2024 - Don Baldridge

*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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