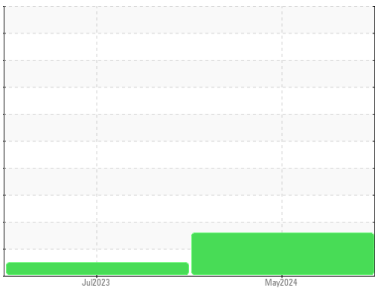
# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Machine Id
**PRESS 2**
Component
**Hydraulic System**
Fluid
**{not provided} (500 GAL)**

## DIAGNOSIS

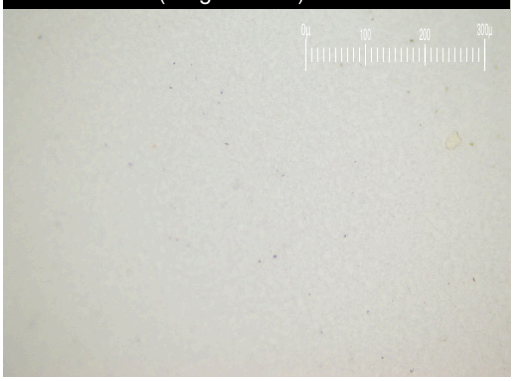
**Recommendation**
We recommend you service the filters on this component. Resample at the next service interval to monitor.

**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.

Particle Filter (Magn: 200 x)



| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PH0000662** | PH0000790 | --- |
| Sample Date | | Client Info | | **12 May 2024** | 23 Jul 2023 | --- |
| Machine Age | mths | Client Info | | **0** | 18 | --- |
| Oil Age | mths | Client Info | | **0** | 18 | --- |
| Oil Changed | | Client Info | | **N/A** | Changed | --- |
| Sample Status | | | | **ABNORMAL** | NORMAL | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.05 | **NEG** | NEG | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **<1** | 1 | --- |
| Chromium | ppm | ASTM D5185m | >20 | **0** | 0 | --- |
| Nickel | ppm | ASTM D5185m | >20 | **0** | <1 | --- |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Silver | ppm | ASTM D5185m | | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >20 | **0** | <1 | --- |
| Lead | ppm | ASTM D5185m | >20 | **0** | 0 | --- |
| Copper | ppm | ASTM D5185m | >20 | **6** | 1 | --- |
| Tin | ppm | ASTM D5185m | >20 | **<1** | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | --- |
| Barium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | **0** | <1 | --- |
| Manganese | ppm | ASTM D5185m | | **1** | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | **135** | 132 | --- |
| Calcium | ppm | ASTM D5185m | | **708** | 654 | --- |
| Phosphorus | ppm | ASTM D5185m | | **330** | 302 | --- |
| Zinc | ppm | ASTM D5185m | | **373** | 383 | --- |
| Sulfur | ppm | ASTM D5185m | | **3076** | 3233 | --- |

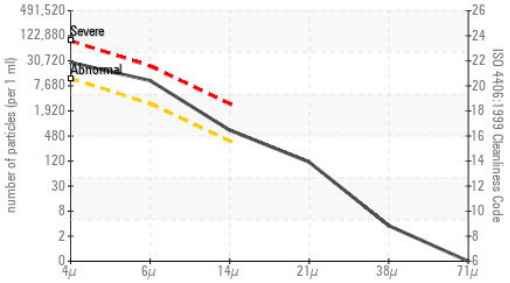
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >15 | **<1** | <1 | --- |
| Sodium | ppm | ASTM D5185m | | **2** | 0 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **0** | 2 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | ▲ **24327** | 2386 | --- |
| Particles >6µm | | ASTM D7647 | >2500 | ▲ **8928** | 619 | --- |
| Particles >14µm | | ASTM D7647 | >320 | ● **580** | 62 | --- |
| Particles >21µm | | ASTM D7647 | >80 | **100** | 23 | --- |
| Particles >38µm | | ASTM D7647 | >20 | **3** | 1 | --- |
| Particles >71µm | | ASTM D7647 | >4 | **0** | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | ▲ **22/20/16** | 18/16/13 | --- |

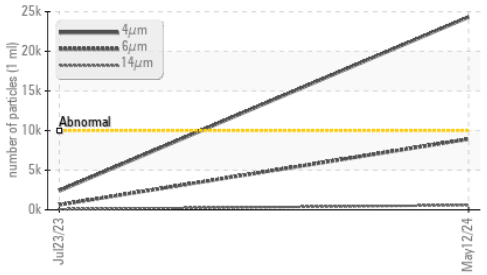
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.627** | 0.40 | --- |

# OIL ANALYSIS REPORT

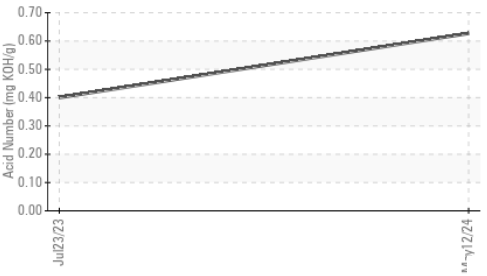
Particle Count



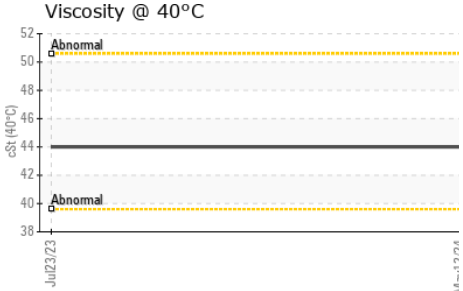

Particle Trend




Acid Number




Viscosity @ 40°C



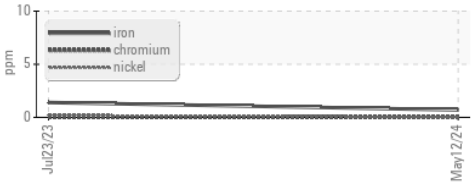

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **NONE** | LIGHT | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.05 | **NEG** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **44.0** | 44.0 | --- |

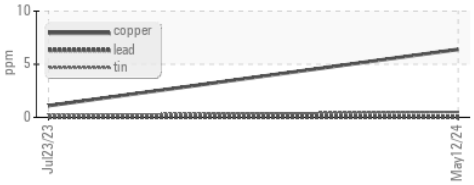
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |
| PrtFilter | | |  |  | *no image* |

GRAPHS

Ferrous Alloys

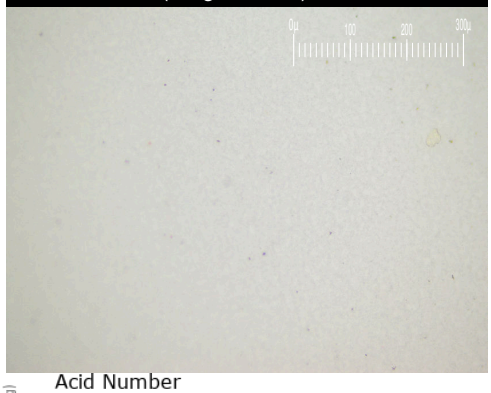



Non-ferrous Metals

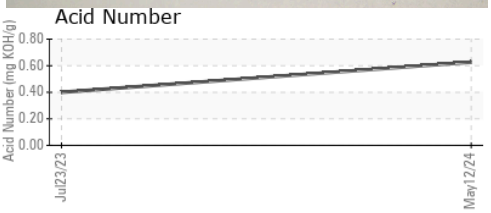



Viscosity @ 40°C


Particle Filter (Magn: 200 x)



Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : PH0000662 **Received** : 13 May 2024
**Lab Number** : 06177106 **Tested** : 16 May 2024
**Unique Number** : 11023159 **Diagnosed** : 16 May 2024 - Angela Borella
**Test Package** : PLANT ( Additional Tests: PrtFilter )

*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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