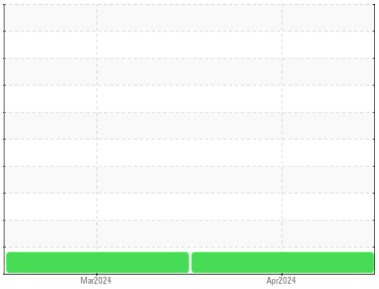
# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Area
**B7**
Machine Id
**GLEASON 312101**
Component
**Hydraulic System**
Fluid
**{not provided} (60 GAL)**

## DIAGNOSIS

**Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

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

**Contamination**
There is a moderate 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.

| SAMPLE INFORMATION | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Sample Number | Client Info | | **FCH0000062** | FCH0000034 | --- |
| Sample Date | Client Info | | **04 Apr 2024** | 27 Mar 2024 | --- |
| Machine Age | Client Info | | **0** | 0 | --- |
| Oil Age | Client Info | | **0** | 0 | --- |
| Oil Changed | Client Info | | **N/A** | N/A | --- |
| Sample Status | | | **ATTENTION** | ABNORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **0** | 1 | --- |
| Chromium | ppm | ASTM D5185m | >10 | **0** | <1 | --- |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 2 | --- |
| Titanium | ppm | ASTM D5185m | | **0** | <1 | --- |
| Silver | ppm | ASTM D5185m | | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 2 | --- |
| Lead | ppm | ASTM D5185m | >10 | **0** | 3 | --- |
| Copper | ppm | ASTM D5185m | >75 | **11** | ▲ 104 | --- |
| Tin | ppm | ASTM D5185m | >10 | **<1** | 8 | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | <1 | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **27** | 0 | --- |
| Barium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | **0** | 1 | --- |
| Manganese | ppm | ASTM D5185m | | **0** | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | **0** | 1 | --- |
| Calcium | ppm | ASTM D5185m | | **4** | 8 | --- |
| Phosphorus | ppm | ASTM D5185m | | **287** | 62 | --- |
| Zinc | ppm | ASTM D5185m | | **0** | 9 | --- |
| Sulfur | ppm | ASTM D5185m | | **9122** | 9631 | --- |

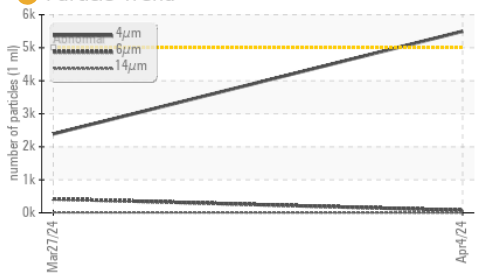
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **<1** | 1 | --- |
| Sodium | ppm | ASTM D5185m | | **<1** | 2 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **0** | <1 | --- |
| Water | % | ASTM D6304 | >0.1 | **NEG** | NEG | --- |

| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Particles >4µm | ASTM D7647 | >5000 | **5497** | 2390 | --- |
| Particles >6µm | ASTM D7647 | >1300 | **74** | 421 | --- |
| Particles >14µm | ASTM D7647 | >160 | **4** | 14 | --- |
| Particles >21µm | ASTM D7647 | >40 | **1** | 2 | --- |
| Particles >38µm | ASTM D7647 | >10 | **0** | 0 | --- |
| Particles >71µm | ASTM D7647 | >3 | **0** | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | **20/13/9** | 18/16/11 | --- |

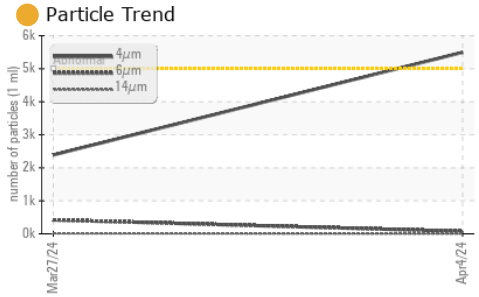
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.84** | 0.41 | --- |

# OIL ANALYSIS REPORT

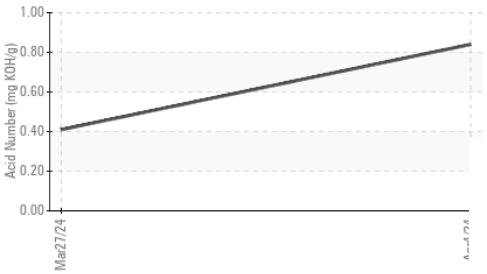
Particle Trend



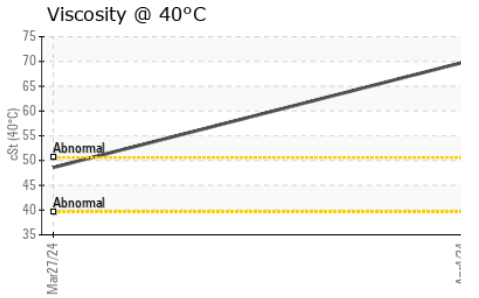

Particle Trend




Acid Number




Viscosity @ 40°C



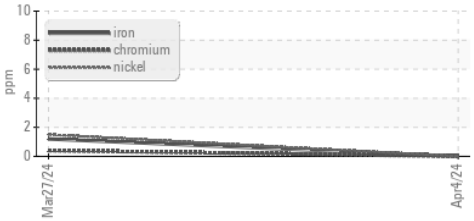

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.1 | **NEG** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **69.8** | 48.6 | --- |

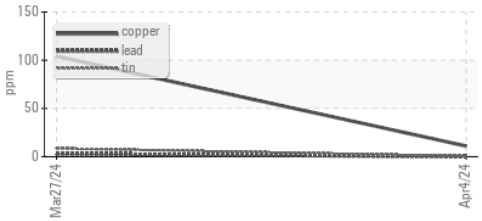
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |

## GRAPHS

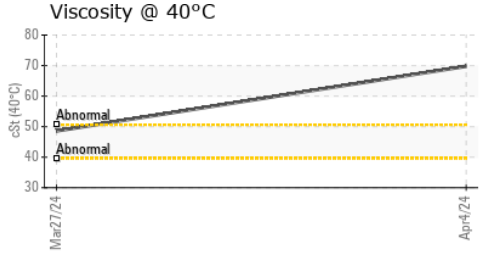
Ferrous Alloys



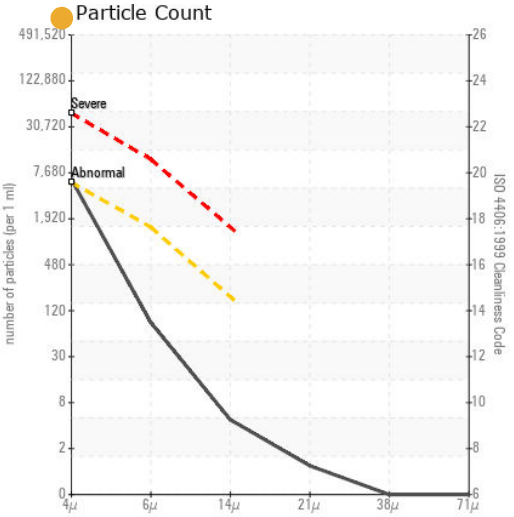

Non-ferrous Metals



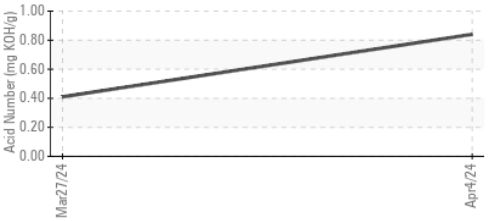

Viscosity @ 40°C




Particle Count




Acid Number




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : FCH0000062
**Lab Number** : 06145856
**Unique Number** : 10975934
**Test Package** : PLANT

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

Certificate L2367

*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)*

**DANA - FAIRFIELD CUSTOM GEARS AND DRIVES**
2400 SAGAMORE PKWY S #2400
LAFAYETTE, IN
US 47905
Contact: Service Manager
Jeffrey.Alexander@fuchs.com
T:
F:

Report Id: UCDANLAF [WUSCAR] 06145856 (Generated: 05/08/2024 09:28:01) Rev: 1

**Submitted By: Wes Davis**