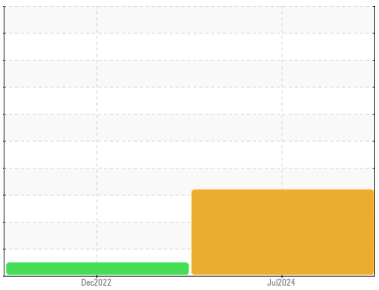
# PROBLEM SUMMARY

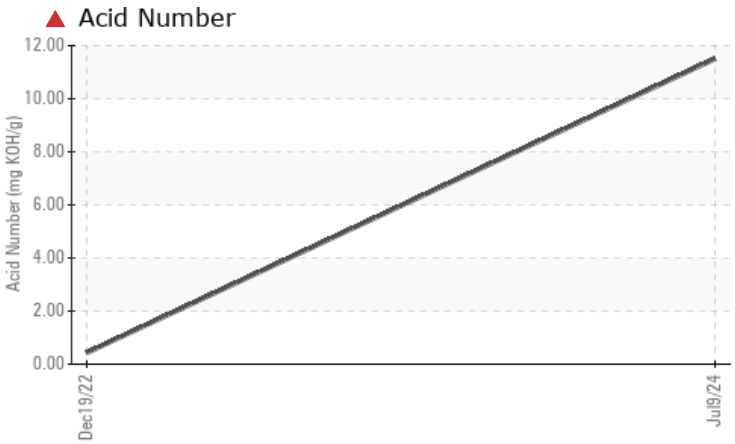
Sample Rating Trend




**DEGRADATION**

Machine Id
**AIR 6**
Component
**Air Compressor**
Fluid
**{not provided} (--- GAL)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | **SEVERE** | NORMAL | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | ▲ **11.50** | 0.42 | --- |

**Customer Id:** CARFORCO
**Sample No.:** USP0012340
**Lab Number:** 06236871
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

*To change component or sample information:*
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Change Fluid | --- | --- | ? | Recommend drain oil if not already done and flush with cleaner before refilling with oil. |
| Flush System | --- | --- | ? | Recommend drain oil if not already done and flush with cleaner before refilling with oil. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

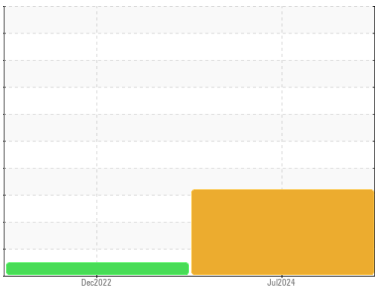
NORMAL

**19 Dec 2022 Diag: Doug Bogart**
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**view report**

# OIL ANALYSIS REPORT

Sample Rating Trend




**DEGRADATION**

Machine Id
## AIR 6
Component
**Air Compressor**
Fluid
**{not provided} (--- GAL)**

## DIAGNOSIS

**▲ Recommendation**
Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

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

**Contamination**
There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

**▲ Fluid Condition**
The AN level is above the recommended limit. Confirmed.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **USP0012340** | USP227730 | --- |
| Sample Date | | Client Info | | **09 Jul 2024** | 19 Dec 2022 | --- |
| Machine Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Changed | | Client Info | | **N/A** | N/A | --- |
| Sample Status | | | | **SEVERE** | NORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **0** | 0 | --- |
| Chromium | ppm | ASTM D5185m | >4 | **0** | 0 | --- |
| Nickel | ppm | ASTM D5185m | >4 | **0** | 0 | --- |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Silver | ppm | ASTM D5185m | | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 0 | --- |
| Lead | ppm | ASTM D5185m | >20 | **0** | 0 | --- |
| Copper | ppm | ASTM D5185m | >40 | **3** | <1 | --- |
| Tin | ppm | ASTM D5185m | >5 | **0** | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | --- |

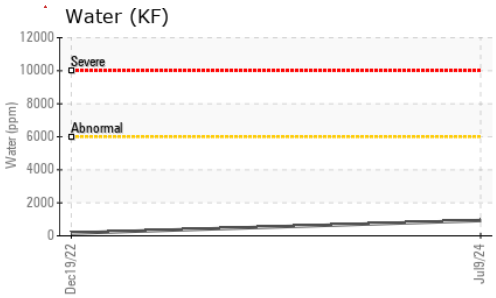
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | --- |
| Barium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | **0** | 0 | --- |
| Manganese | ppm | ASTM D5185m | | **<1** |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

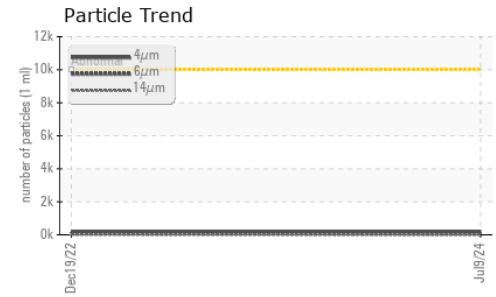
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **<1** | 2 | --- |
| Sodium | ppm | ASTM D5185m | | **1** | 0 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **1** | <1 | --- |
| Water | % | ASTM D6304 | >0.6 | **0.092** | 0.016 | --- |
| ppm Water | ppm | ASTM D6304 | >6000 | **927** | 163.1 | --- |

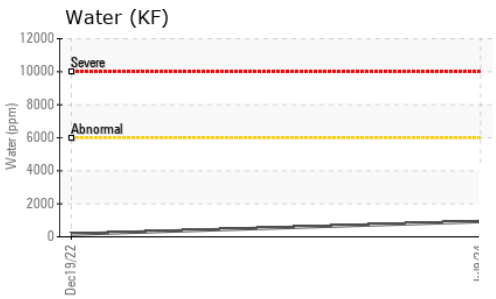
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | **186** | 199 | --- |
| Particles >6µm | | ASTM D7647 | >2500 | **62** | 70 | --- |
| Particles >14µm | | ASTM D7647 | >320 | **8** | 9 | --- |
| Particles >21µm | | ASTM D7647 | >80 | **2** | 4 | --- |
| Particles >38µm | | ASTM D7647 | >20 | **0** | 1 | --- |
| Particles >71µm | | ASTM D7647 | >4 | **0** | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | **15/13/10** | 15/13/10 | --- |

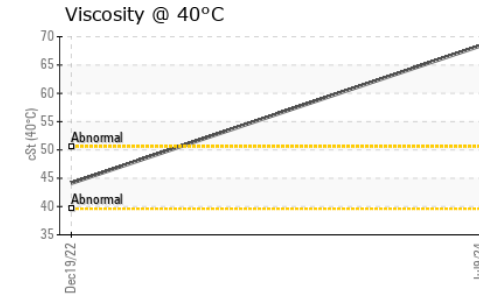
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | ▲ **11.50** | 0.42 | --- |

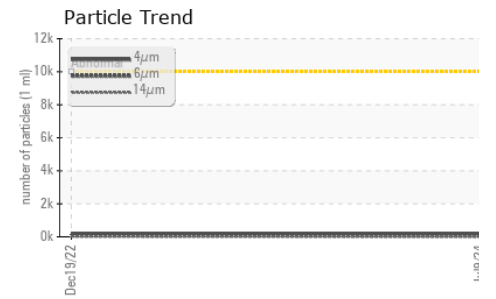
# OIL ANALYSIS REPORT



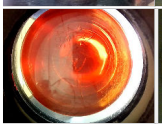
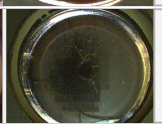



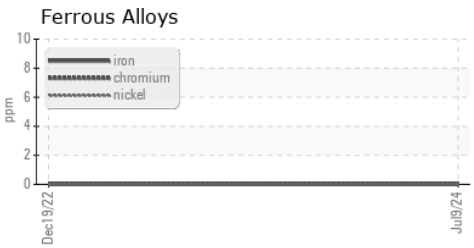



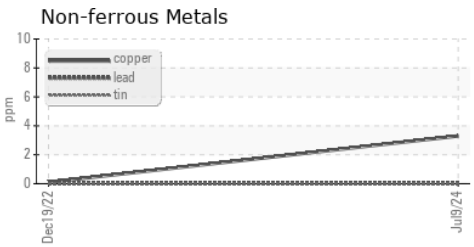

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | 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 | >0.6 | **NEG** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

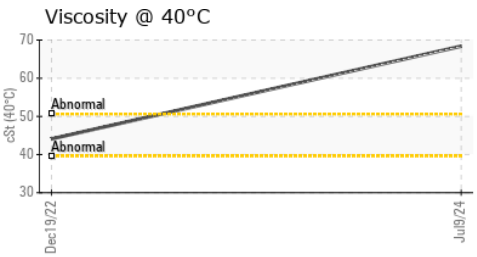
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **68.4** | 44.1 | --- |

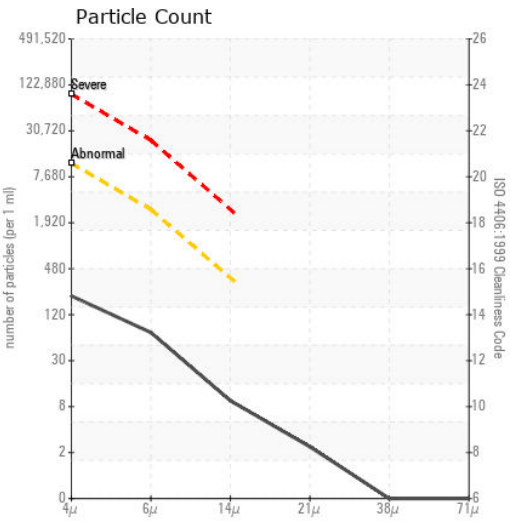
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |

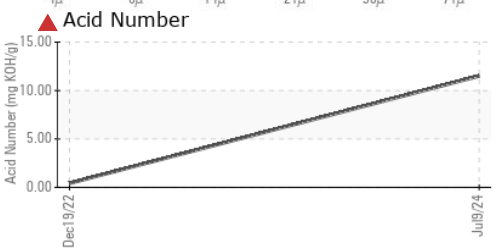
## GRAPHS




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : USP0012340
**Lab Number** : 06236871
**Unique Number** : 11125705
**Test Package** : IND 2

**Received** : 15 Jul 2024
**Tested** : 18 Jul 2024
**Diagnosed** : 18 Jul 2024 - Doug Bogart

**CARGILL**

FORT MORGAN, CO
US
Contact:
T:
F:

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)*