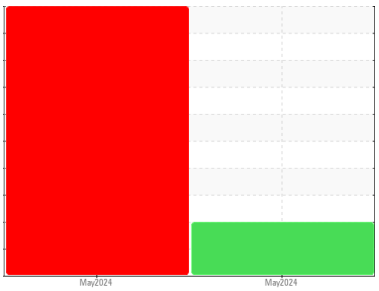
# OIL ANALYSIS REPORT

Sample Rating Trend




**VISCOSITY**

Machine Id
**2121**
Component
**Compressor**
Fluid
**SAE NON DETERGENT 30 (--- GAL)**

## DIAGNOSIS

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

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

**Contamination**
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

**Fluid Condition**
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **TO60001046** | TO60001053 | --- |
| Sample Date | | Client Info | | **24 May 2024** | 23 May 2024 | --- |
| Machine Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Changed | | Client Info | | **N/A** | N/A | --- |
| Sample Status | | | | **ABNORMAL** | SEVERE | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **1** | 1 | --- |
| Chromium | ppm | ASTM D5185m | >10 | **<1** | <1 | --- |
| Nickel | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Silver | ppm | ASTM D5185m | | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | **7** | 4 | --- |
| Lead | ppm | ASTM D5185m | >25 | **<1** | <1 | --- |
| Copper | ppm | ASTM D5185m | >50 | **<1** | <1 | --- |
| Tin | ppm | ASTM D5185m | >15 | **<1** | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Cadmium | ppm | ASTM D5185m | | **<1** | <1 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **4** | 5 | --- |
| Barium | ppm | ASTM D5185m | | **0** | <1 | --- |
| Molybdenum | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Manganese | ppm | ASTM D5185m | | **0** | 0 | --- |
| Magnesium | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Calcium | ppm | ASTM D5185m | | **124** | 3 | --- |
| Phosphorus | ppm | ASTM D5185m | | **46** | 60 | --- |
| Zinc | ppm | ASTM D5185m | | **39** | <1 | --- |
| Sulfur | ppm | ASTM D5185m | | **0** | 111 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **2** | 1 | --- |
| Sodium | ppm | ASTM D5185m | | **6** | 9 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **3** | 2 | --- |
| Water | % | ASTM D6304 | >0.1 | **0.013** | ▲ 2.073 | --- |
| ppm Water | ppm | ASTM D6304 | >1000 | **132** | ▲ 20731 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | ▲ **141231** | ▲ 125033 | --- |
| Particles >6µm | | ASTM D7647 | >2500 | ● **4186** | ▲ 46023 | --- |
| Particles >14µm | | ASTM D7647 | >320 | **19** | ▲ 3360 | --- |
| Particles >21µm | | ASTM D7647 | >80 | **7** | ▲ 749 | --- |
| Particles >38µm | | ASTM D7647 | >20 | **0** | 23 | --- |
| Particles >71µm | | ASTM D7647 | >4 | **0** | 1 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | ▲ **24/19/11** | ▲ 24/23/19 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.40** | 0.076 | --- |

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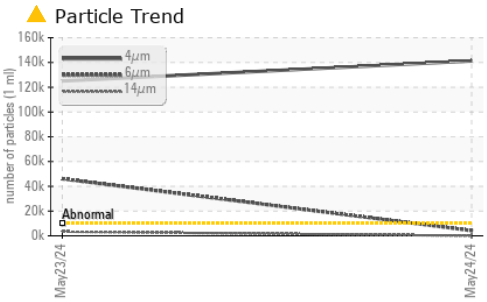
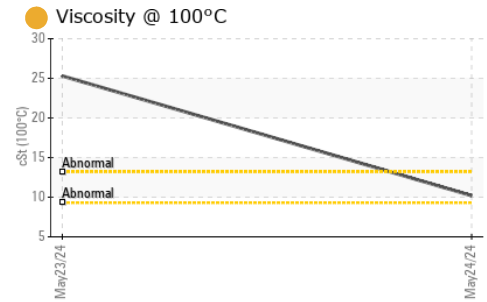
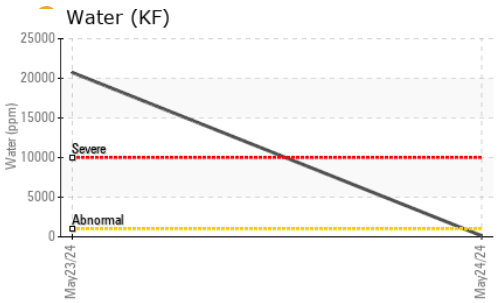
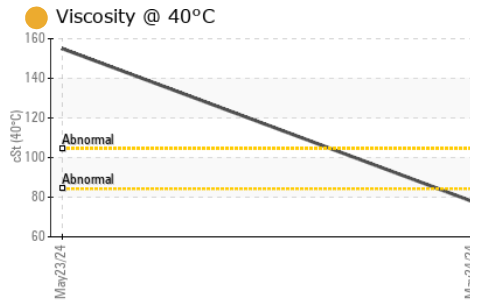
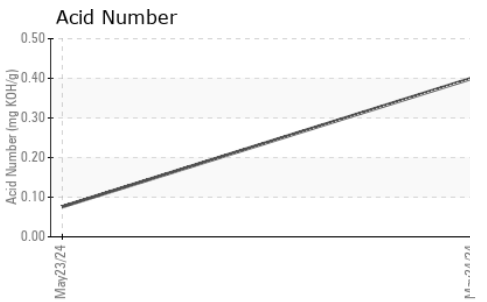


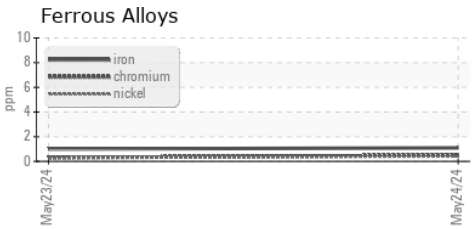



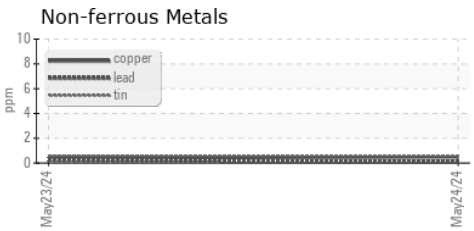

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **NONE** | ▲ MODER | --- |
| 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 | --- |

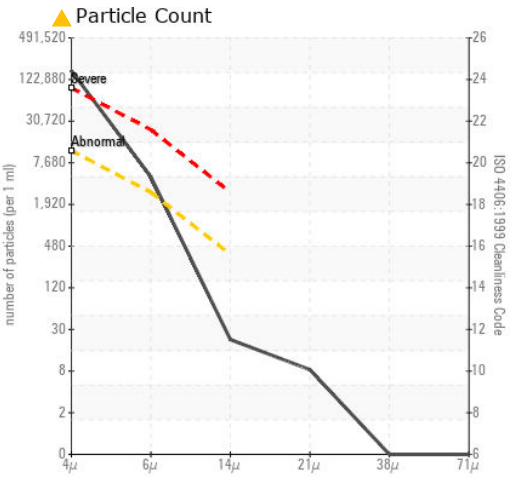
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **78.0** | 155 | --- |
| Visc @ 100°C | cSt | ASTM D445 | | **10.2** | 25.3 | --- |
| Viscosity Index (VI) | Scale | ASTM D2270 | | **112** | 198 | --- |

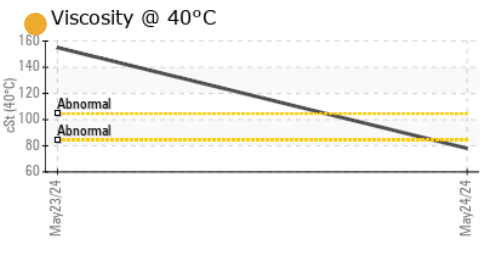
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |

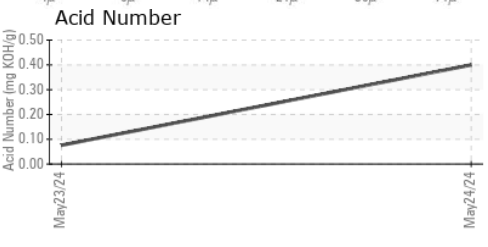
## GRAPHS




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : TO60001046
**Lab Number** : 06195415
**Unique Number** : 11057538
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**Received** : 30 May 2024
**Tested** : 31 May 2024
**Diagnosed** : 04 Jun 2024 - Jonathan Hester

Certificate L2367

**KINGSLY COMPRESSION INC**
3956 GLENN HWY
CAMBRIDGE, OH
US 43725
Contact: JOSH PEYTON

*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)*

T:
F: