



OIL ANALYSIS REPORT

Sample Rating Trend

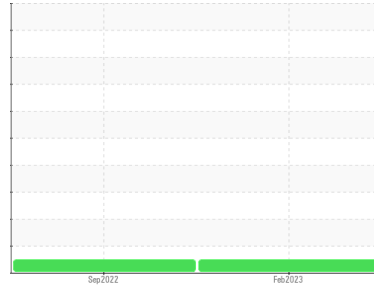
NORMAL



Machine Id
10 KNIFE RENTAL (S/N 3211)

Component
Hydraulic System

Fluid
NOT GIVEN (450 LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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 | | WC0743528 | WC0711924 | --- |
| Sample Date | Client Info | | 28 Feb 2023 | 19 Sep 2022 | --- |
| Machine Age | hrs | Client Info | 247 | 13 | --- |
| Oil Age | hrs | Client Info | 247 | 13 | --- |
| Oil Changed | Client Info | | N/A | Not Chngd | --- |
| Sample Status | | | NORMAL | NORMAL | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >20 | <1 | 0 | --- |
| Chromium | ppm | ASTM D5185m >20 | 0 | 0 | --- |
| Nickel | ppm | ASTM D5185m >20 | 0 | 0 | --- |
| 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 | 2 | 1 | --- |
| Tin | ppm | ASTM D5185m >20 | 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 | <1 | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185m | 0 | 0 | --- |
| Magnesium | ppm | ASTM D5185m | 0 | <1 | --- |
| Calcium | ppm | ASTM D5185m | 66 | 70 | --- |
| Phosphorus | ppm | ASTM D5185m | 297 | 324 | --- |
| Zinc | ppm | ASTM D5185m | 376 | 403 | --- |
| Sulfur | ppm | ASTM D5185m | 8024 | 8282 | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 7 | 6 | --- |
| Sodium | ppm | ASTM D5185m | <1 | <1 | --- |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | --- |

FLUID CLEANLINESS

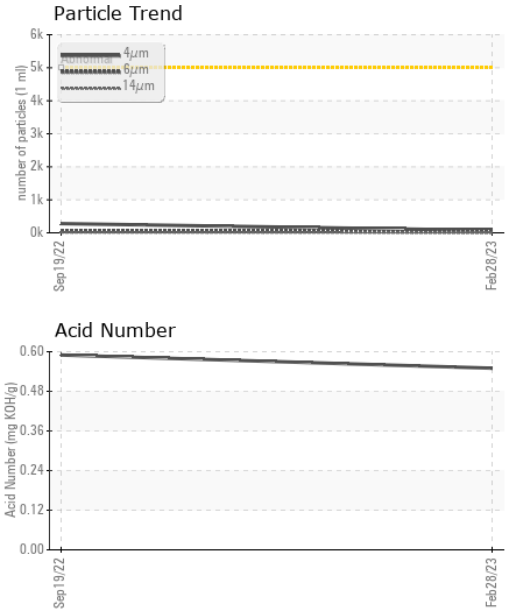
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 73 | 280 | --- |
| Particles >6µm | ASTM D7647 | >1300 | 27 | 51 | --- |
| Particles >14µm | ASTM D7647 | >160 | 4 | 9 | --- |
| 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 | 13/12/9 | 15/13/10 | --- |

FLUID DEGRADATION

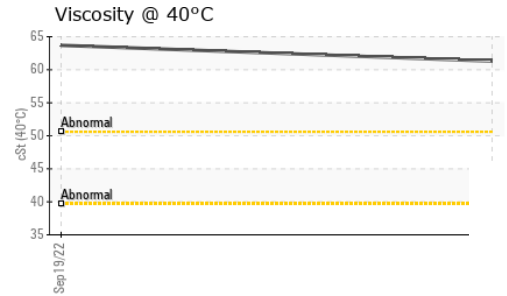
| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.55 | 0.59 | --- |



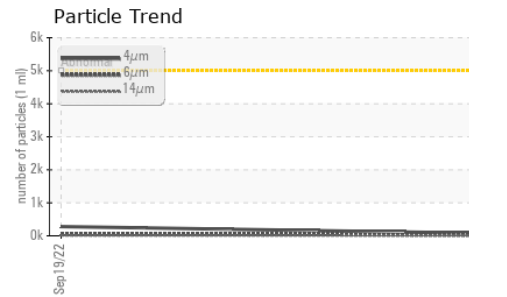
OIL ANALYSIS REPORT



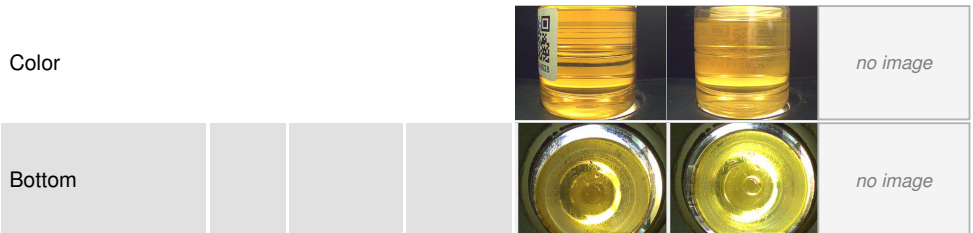
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | ---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



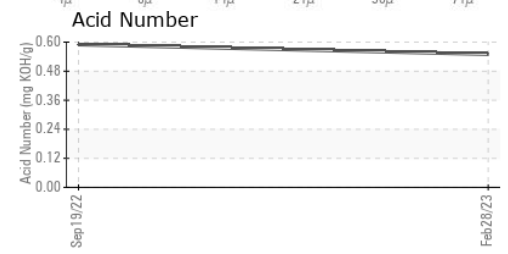
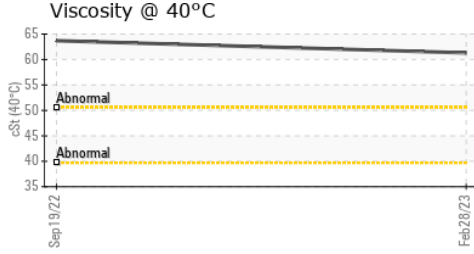
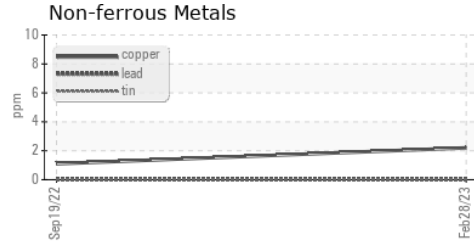
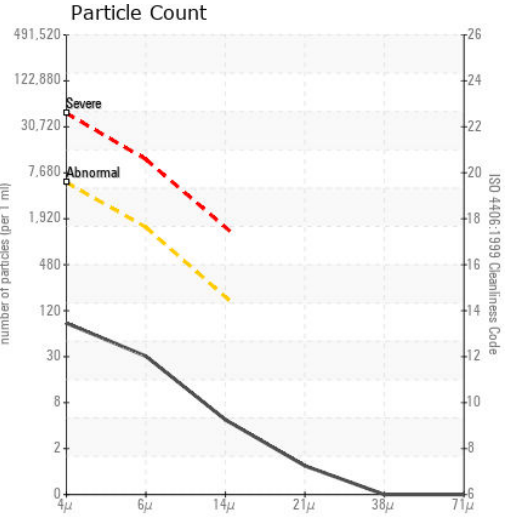
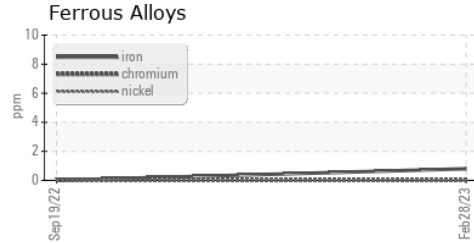
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 61.3 | 63.7 | --- |



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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0743528 **Received** : 02 Mar 2023
Lab Number : 05781206 **Diagnosed** : 03 Mar 2023
Unique Number : 10360876 **Diagnostician** : Jonathan Hester
Test Package : PLANT

EFACTOR3 LLC
 15050 CHOATE CIR, SUITE E
 CHARLOTTE, NC
 US 28273
 Contact: L. REID
 LREID@EFACTOR3.COM
 T:
 F: (704)944-3234

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)