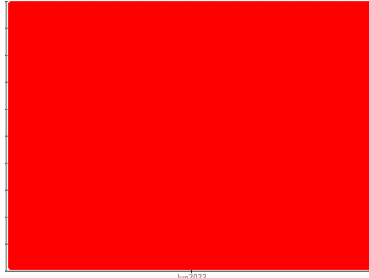


PROBLEM SUMMARY

Sample Rating Trend

WEAR

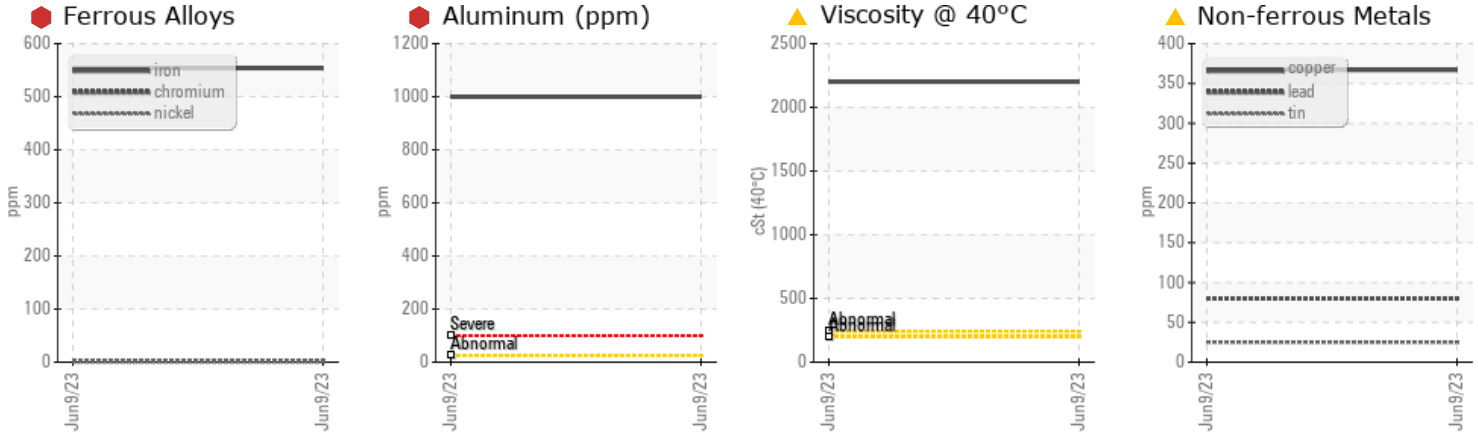


Machine Id
ENTRY

Component
Gearbox

Fluid
SHAEFFERS MOLY UNIVERSAL G/O (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | SEVERE | --- | --- |
|---------------|-----|-------------|------|--------|-----|-----|
| Iron | ppm | ASTM D5185m | >200 | 554 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >25 | 1000 | --- | --- |
| Copper | ppm | ASTM D5185m | >200 | 367 | --- | --- |
| Tin | ppm | ASTM D5185m | >25 | 25 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | | 2201 | --- | --- |

Customer Id: NATEAS
Sample No.: PCA0100286
Lab Number: 05872746
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

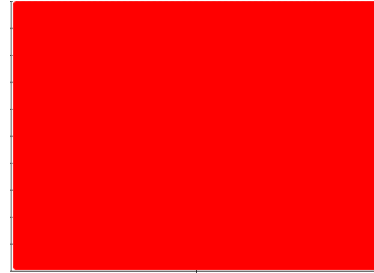
| Action | Status | Date | Done By | Description |
|---------------------|--------|------|---------|---|
| Inspect Wear Source | --- | --- | ? | We advise that you inspect for the source(s) of wear. |
| Change Fluid | --- | --- | ? | We recommend that you drain the oil from the component if this has not already been done. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

HISTORICAL DIAGNOSIS

Machine Id
ENTRY

Component
Gearbox

Fluid
SHAEFFERS MOLY UNIVERSAL G/O (--- GAL)



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Bearing and/or gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info | PCA0100286 | --- | --- |
| Sample Date | Client Info | 09 Jun 2023 | --- | --- |
| Machine Age | hrs Client Info | 0 | --- | --- |
| Oil Age | hrs Client Info | 0 | --- | --- |
| Oil Changed | Client Info | N/A | --- | --- |
| Sample Status | | SEVERE | --- | --- |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|--------------------------|------------|--------------|----------|----------|
| Iron ppm ASTM D5185m | >200 | 554 | --- | --- |
| Chromium ppm ASTM D5185m | >15 | 2 | --- | --- |
| Nickel ppm ASTM D5185m | >15 | 2 | --- | --- |
| Titanium ppm ASTM D5185m | | <1 | --- | --- |
| Silver ppm ASTM D5185m | | <1 | --- | --- |
| Aluminum ppm ASTM D5185m | >25 | 1000 | --- | --- |
| Lead ppm ASTM D5185m | >100 | 80 | --- | --- |
| Copper ppm ASTM D5185m | >200 | 367 | --- | --- |
| Tin ppm ASTM D5185m | >25 | 25 | --- | --- |
| Vanadium ppm ASTM D5185m | | <1 | --- | --- |
| Cadmium ppm ASTM D5185m | | 0 | --- | --- |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|----------------------------|------------|--------------|----------|----------|
| Boron ppm ASTM D5185m | | 19 | --- | --- |
| Barium ppm ASTM D5185m | | <1 | --- | --- |
| Molybdenum ppm ASTM D5185m | | 275 | --- | --- |
| Manganese ppm ASTM D5185m | | 5 | --- | --- |
| Magnesium ppm ASTM D5185m | | 35 | --- | --- |
| Calcium ppm ASTM D5185m | | 113 | --- | --- |
| Phosphorus ppm ASTM D5185m | | 841 | --- | --- |
| Zinc ppm ASTM D5185m | | 228 | --- | --- |
| Sulfur ppm ASTM D5185m | | 11349 | --- | --- |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|---------------------------|------------|-----------|----------|----------|
| Silicon ppm ASTM D5185m | >50 | 29 | --- | --- |
| Sodium ppm ASTM D5185m | | 2 | --- | --- |
| Potassium ppm ASTM D5185m | >20 | 3 | --- | --- |

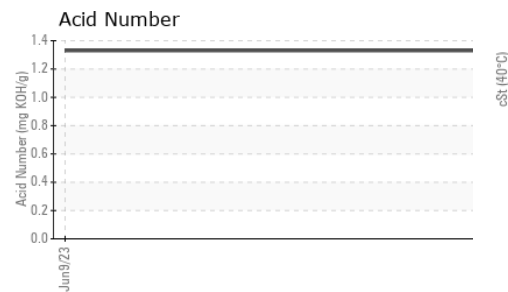
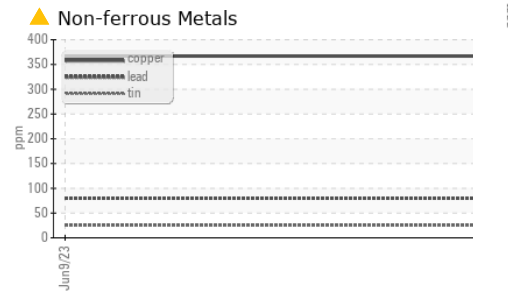
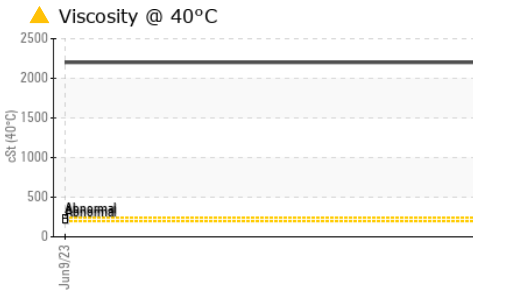
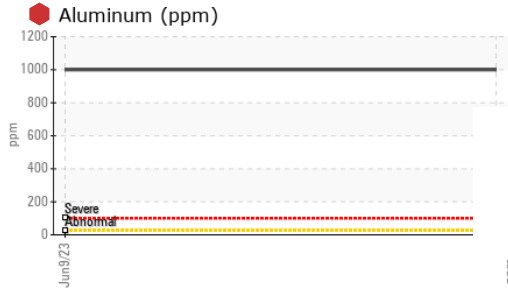
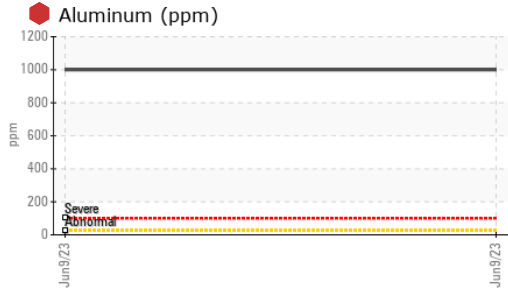
FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|--------------------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 | | 1.33 | --- | --- |

VISUAL

| method | limit/base | current | history1 | history2 |
|---------------------------------|------------|--------------|----------|----------|
| White Metal scalar *Visual | NONE | MODER | --- | --- |
| 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 | >0.2 | NEG | --- | --- |
| Free Water scalar *Visual | | NEG | --- | --- |

OIL ANALYSIS REPORT

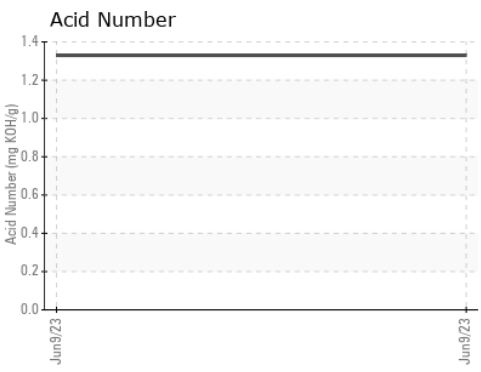
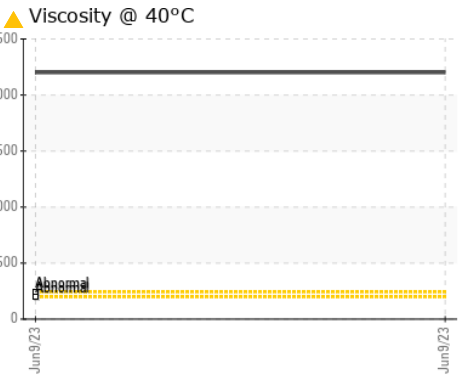
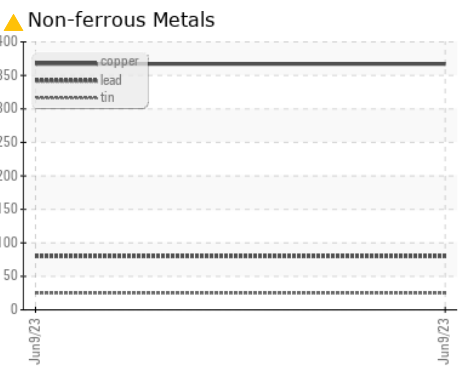
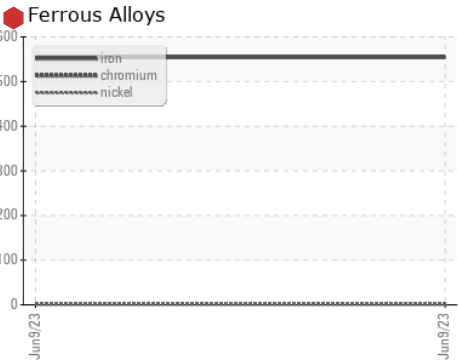


| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|-----------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | | ▲ 2201 | --- | --- |

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

| | | | | |
|--------|--|--|----------|----------|
| Color | | | no image | no image |
| Bottom | | | no image | no image |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100286 **Received** : 13 Jun 2023
Lab Number : 05872746 **Diagnosed** : 16 Jun 2023
Unique Number : 10512530 **Diagnostician** : Jonathan Hester
Test Package : IND 2

NATIONAL MATERIAL PROCESSING
 4506 CLINE AVE
 EAST CHICAGO, IN
 US 46312
 Contact: RYAN CANO
 rcano@nmlp.com
 T:
 F:

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)