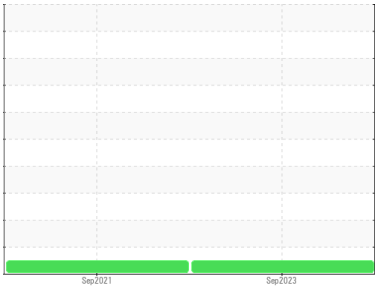
# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Machine Id
## OUT STANDING (S/N 42265L)
Component
**Port Gearbox**
Fluid
**SHELL ROTELLA T 30 (4 QTS)**

## 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 no indication of any contamination in the oil.

**Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0850537** | MW0622727 | --- |
| Sample Date | | Client Info | | **29 Sep 2023** | 21 Sep 2021 | --- |
| Machine Age | hrs | Client Info | | **610** | 550 | --- |
| Oil Age | hrs | Client Info | | **60** | 100 | --- |
| Oil Changed | | Client Info | | **N/A** | Not Changd | --- |
| Sample Status | | | | **NORMAL** | NORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >200 | **20** | 32 | --- |
| Chromium | ppm | ASTM D5185m | >10 | **<1** | 0 | --- |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 0 | --- |
| Titanium | ppm | ASTM D5185m | | **<1** | 0 | --- |
| Silver | ppm | ASTM D5185m | | **0** | <1 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | **0** | 1 | --- |
| Lead | ppm | ASTM D5185m | >50 | **119** | 206 | --- |
| Copper | ppm | ASTM D5185m | >200 | **183** | 276 | --- |
| Tin | ppm | ASTM D5185m | >10 | **2** | 2 | --- |
| Antimony | ppm | ASTM D5185m | >5 | **---** | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | **<1** | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | **<1** | 0 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 0 | **10** | 18 | --- |
| Barium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | **85** | 47 | --- |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | **39** | 65 | --- |
| Calcium | ppm | ASTM D5185m | 1890 | **2202** | 1856 | --- |
| Phosphorus | ppm | ASTM D5185m | 680 | **936** | 817 | --- |
| Zinc | ppm | ASTM D5185m | 750 | **1049** | 983 | --- |
| Sulfur | ppm | ASTM D5185m | | **2974** | 2752 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **4** | 3 | --- |
| Sodium | ppm | ASTM D5185m | | **2** | 1 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | 0 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **1.36** | 0.840 | --- |

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | VLITE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **LIGHT** | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.2 | **NEG** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

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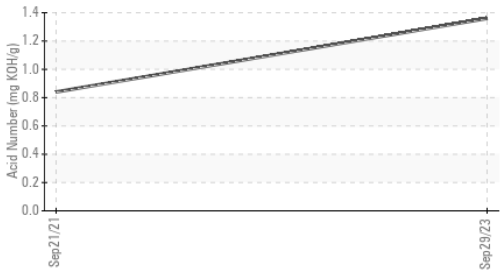
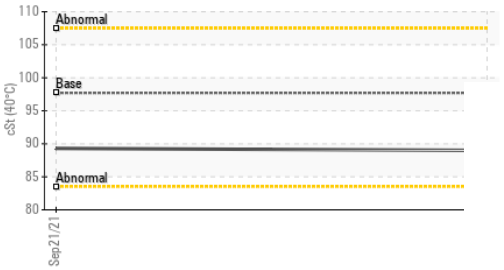
Acid Number




Viscosity @ 40°C

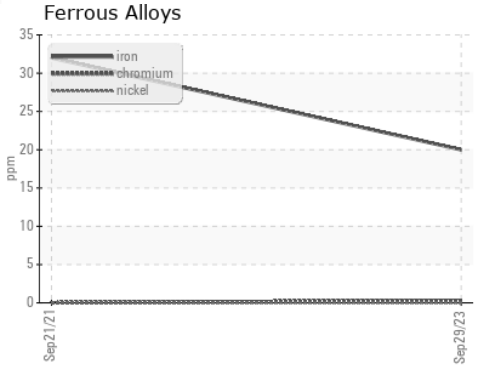



| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 97.7 | **89.0** | 89.3 | --- |

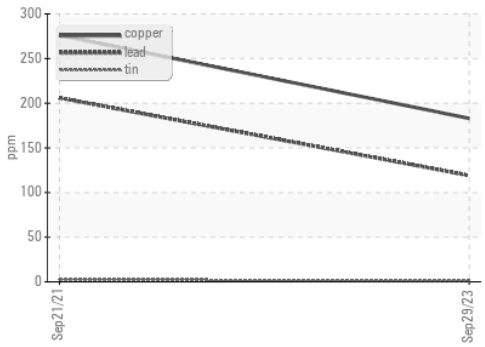
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | *no image* | *no image* | *no image* |
| Bottom | | | *no image* | *no image* | *no image* |

## GRAPHS

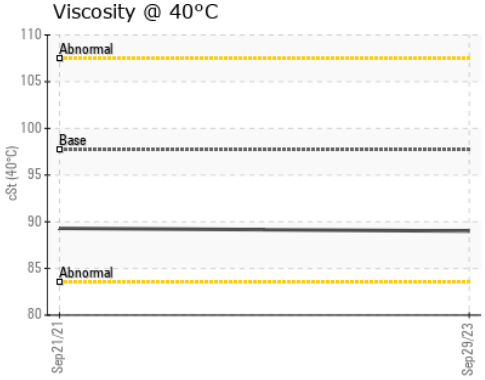
Ferrous Alloys



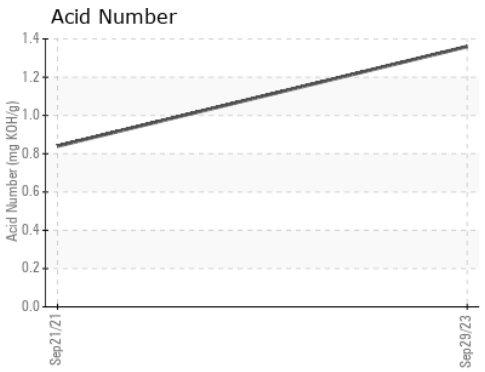

Non-ferrous Metals




Viscosity @ 40°C




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0850537
**Lab Number** : 05969081
**Unique Number** : 10675632
**Test Package** : MAR 2

**Received** : 04 Oct 2023
**Diagnosed** : 06 Oct 2023
**Diagnostician** : Jonathan Hester

*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)*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