



OIL ANALYSIS REPORT

| | |
|-----------------|----------|
| WEAR | NORMAL |
| CONTAMINATION | ABNORMAL |
| FLUID CONDITION | NORMAL |

Area
Contracting

Machine Id
5109 5109

Component
Rear Left Wheel Hub

Fluid
GEAR OIL SAE 75W90 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | WC0939257 | --- | --- |
| Sample Date | | Client Info | | 22 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 3278 | --- | --- |
| Oil Age | hrs | Client Info | | 1022 | --- | --- |
| Filter Age | hrs | Client Info | | 1022 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Not Chngd | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >500 | 468 | --- | --- |
| Chromium | ppm | ASTM D5185m | >8 | 4 | --- | --- |
| Nickel | ppm | ASTM D5185m | >5 | 3 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >5 | 2 | --- | --- |
| Lead | ppm | ASTM D5185m | >5 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m | >50 | 1 | --- | --- |
| Tin | ppm | ASTM D5185m | | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

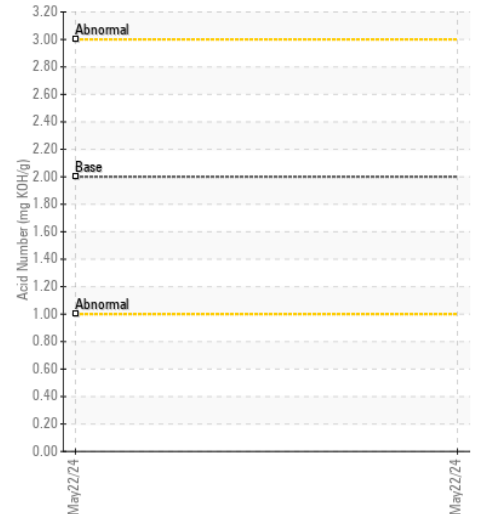
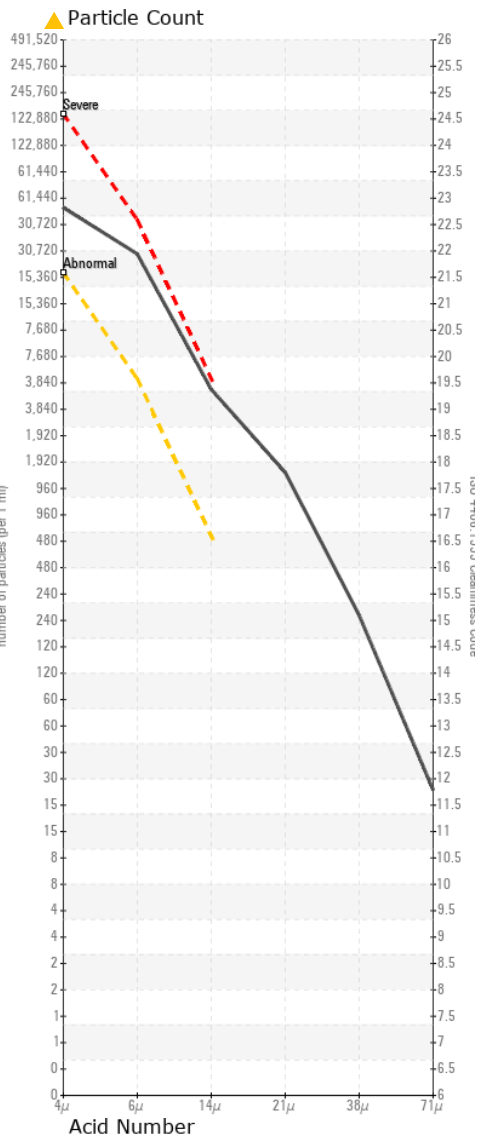
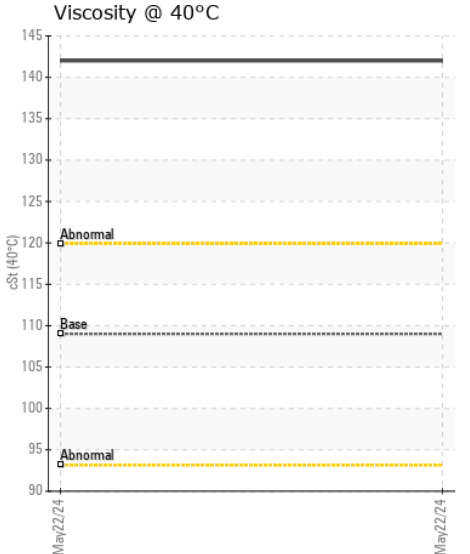
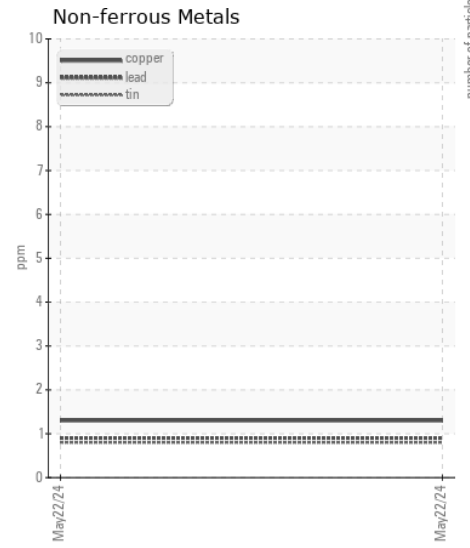
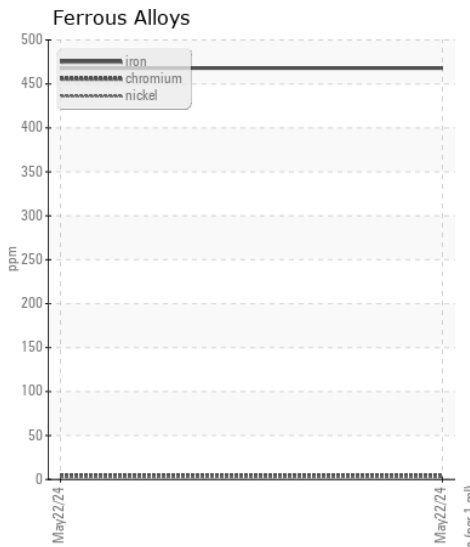
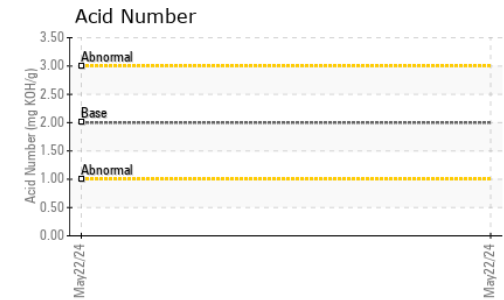
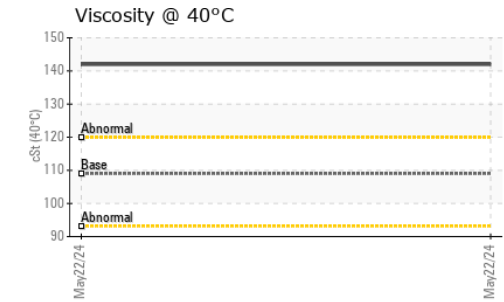
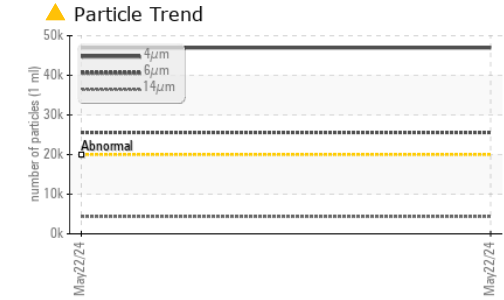
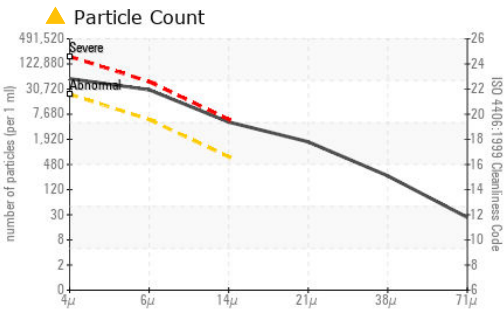
There is a high amount of particulates present in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|------------|-----|-----|
| Silicon | ppm | ASTM D5185m | >25 | 10 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 6 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | >20000 | ▲ 46952 | --- | --- |
| Particles >6µm | | ASTM D7647 | >5000 | ▲ 25578 | --- | --- |
| Particles >14µm | | ASTM D7647 | >640 | ▲ 4353 | --- | --- |
| Particles >21µm | | ASTM D7647 | >160 | ▲ 1466 | --- | --- |
| Particles >38µm | | ASTM D7647 | >40 | ▲ 226 | --- | --- |
| Particles >71µm | | ASTM D7647 | >10 | ▲ 23 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | ▲ 23/22/19 | --- | --- |
| Silt | scalar | *Visual | NONE | MODER | --- | --- |
| 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 | --- | --- |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|-------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 4 | --- | --- |
| Boron | ppm | ASTM D5185m | 400 | 20 | --- | --- |
| Barium | ppm | ASTM D5185m | 200 | <1 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 12 | 2 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 6 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 12 | 20 | --- | --- |
| Calcium | ppm | ASTM D5185m | 150 | 54 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1650 | 581 | --- | --- |
| Zinc | ppm | ASTM D5185m | 125 | 53 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 22500 | 22723 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 109 | 142 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0939257 Received : 28 May 2024
 Lab Number : 06192729 Tested : 31 May 2024
 Unique Number : 11049481 Diagnosed : 31 May 2024 - Jonathan Hester
 Test Package : CONST (Additional Tests: PrtCount)

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)

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509

Contact: Leigh Dennis
 rdennis@thesunrockgroup.com

T: (919)575-4505

F: (919)575-0162