



OIL ANALYSIS REPORT

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



Area
RMR-Trinity
 Machine Id
1216-96585 LIEBHERR LH50M 1216-96585
 Component
Rear Left Wheel Hub
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | DJJ0022462 | DJJ0022465 | DJJ0019894 |
| Sample Date | | Client Info | | 12 Apr 2024 | 11 Apr 2024 | 20 Jul 2023 |
| Machine Age | hrs | Client Info | | 11651 | 11651 | 10527 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >325 | 48 | 96 | 45 |
| Chromium | ppm | ASTM D5185m | >3 | 1 | 1 | 0 |
| Nickel | ppm | ASTM D5185m | >2 | 1 | 1 | 0 |
| Titanium | ppm | ASTM D5185m | >4 | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >2 | <1 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 1 | 3 | <1 |
| Lead | ppm | ASTM D5185m | >3 | 1 | 1 | 0 |
| Copper | ppm | ASTM D5185m | >70 | 6 | 7 | 5 |
| Tin | ppm | ASTM D5185m | >2 | 1 | 1 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

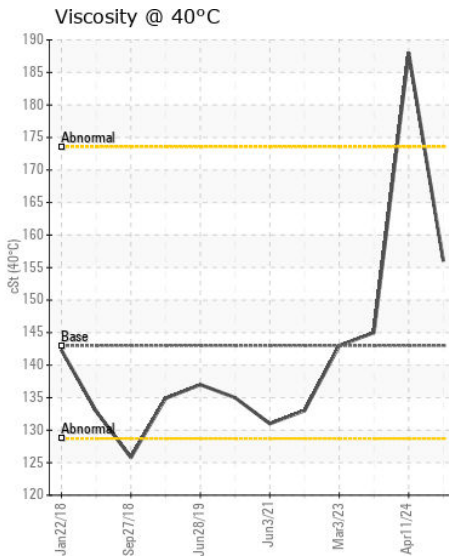
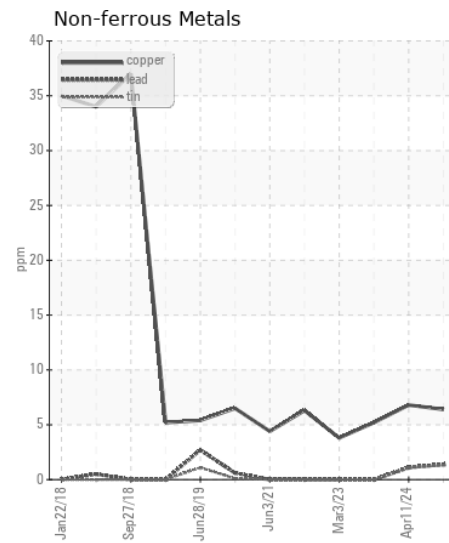
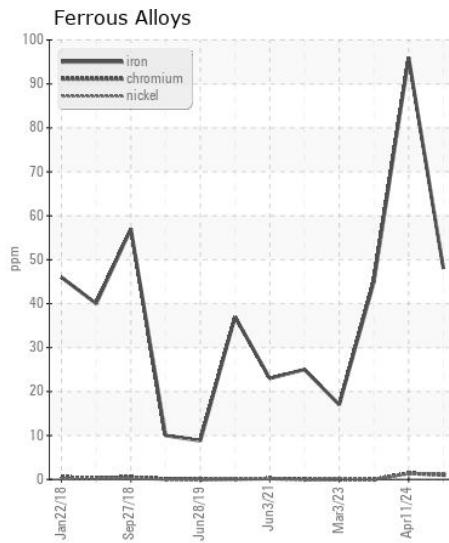
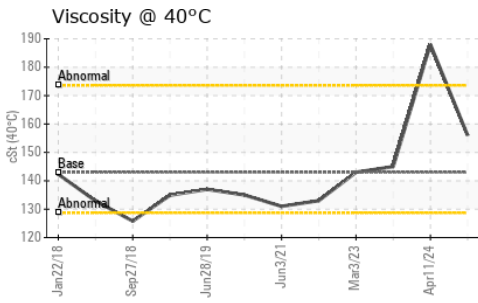
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >70 | 4 | 10 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 3 | 0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | >170 | 4 | 14 | 4 |
| Boron | ppm | ASTM D5185m | 400 | 129 | 30 | 181 |
| Barium | ppm | ASTM D5185m | 200 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 12 | 2 | 1 | <1 |
| Manganese | ppm | ASTM D5185m | | 2 | 3 | <1 |
| Magnesium | ppm | ASTM D5185m | 12 | 3 | 2 | 1 |
| Calcium | ppm | ASTM D5185m | 150 | 44 | 69 | 40 |
| Phosphorus | ppm | ASTM D5185m | 1650 | 1805 | 2252 | 1613 |
| Zinc | ppm | ASTM D5185m | 125 | 30 | 55 | 19 |
| Sulfur | ppm | ASTM D5185m | 22500 | 25701 | 30109 | 25056 |
| Visc @ 40°C | cSt | ASTM D445 | 143 | 156 | 188 | 145 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0022462
Lab Number : 06152379
Unique Number : 10982457
Test Package : CONST

Received : 17 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 18 Apr 2024 - Wes Davis

RIVER METALS RECYCLING - DECATUR FACILITY
 4301 IVERSON BLVD
 TRINITY, AL
 US 35673
 Contact: RYAN BOWDEN

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: