



OIL ANALYSIS REPORT

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



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

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | DJJ0022463 | DJJ0019893 | DJJ0010678 |
| Sample Date | | Client Info | | 12 Apr 2024 | 20 Jul 2023 | 03 Mar 2023 |
| Machine Age | hrs | Client Info | | 11651 | 10527 | 10023 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | Changed | N/A |
| 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 | 74 | 161 | 59 |
| Chromium | ppm | ASTM D5185m | >3 | 1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | 1 | 2 |
| Lead | ppm | ASTM D5185m | >3 | 1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >70 | 4 | 8 | 4 |
| Tin | ppm | ASTM D5185m | >2 | 1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | VLITE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

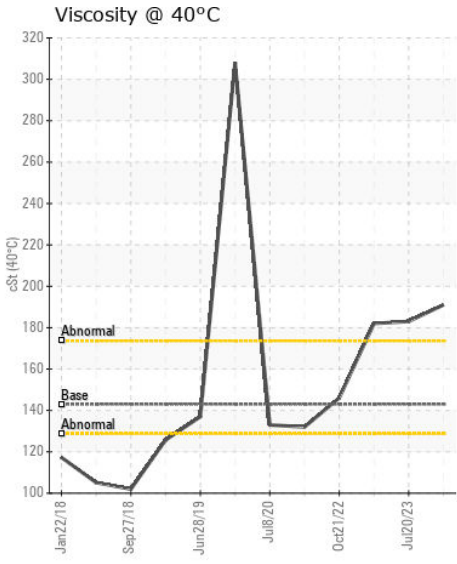
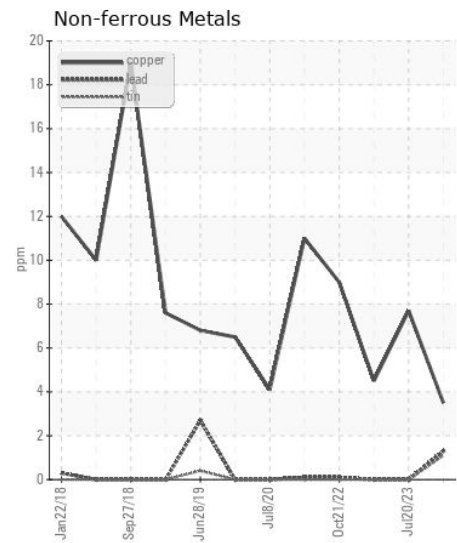
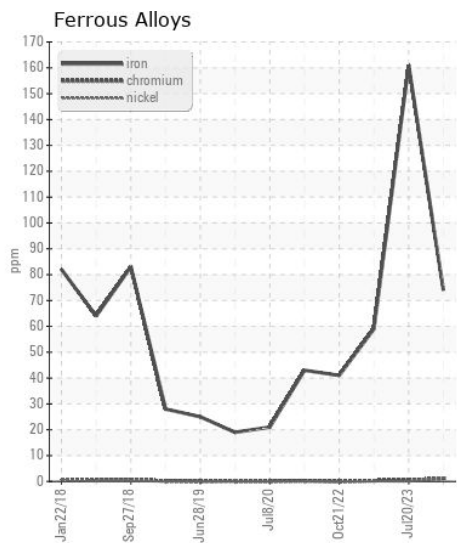
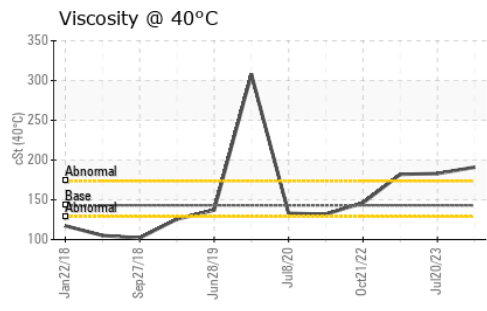
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >70 | 5 | 5 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 1 | 1 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | LIGHT |
| 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 | 14 | 15 | 8 |
| Boron | ppm | ASTM D5185m | 400 | 25 | 46 | 28 |
| Barium | ppm | ASTM D5185m | 200 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 12 | 1 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | | 2 | 2 | 1 |
| Magnesium | ppm | ASTM D5185m | 12 | 2 | 1 | 3 |
| Calcium | ppm | ASTM D5185m | 150 | 79 | 102 | 65 |
| Phosphorus | ppm | ASTM D5185m | 1650 | 2086 | 2075 | 1888 |
| Zinc | ppm | ASTM D5185m | 125 | 60 | 58 | 39 |
| Sulfur | ppm | ASTM D5185m | 22500 | 28401 | 25056 | 28569 |
| Visc @ 40°C | cSt | ASTM D445 | 143 | 191 | 183 | 182 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0022463
Lab Number : 06152378
Unique Number : 10982456
Test Package : CONST
Received : 17 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 22 Apr 2024 - Sean Felton

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: