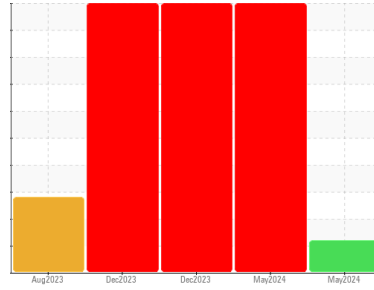




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
Building 12
 Machine Id
Roll Crusher 1
 Component
Northeast Bearing
 Fluid
MOBIL MOBILGEAR 600 XP ISO 68 (3 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The iron level has decreased, but is still abnormal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0936858 | WC0936861 | WC0882559 |
| Sample Date | Client Info | | 19 May 2024 | 09 May 2024 | 31 Dec 2023 |
| Machine Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 | 64 |
| Oil Changed | Client Info | | N/A | Changed | Changed |
| Sample Status | | | ATTENTION | SEVERE | SEVERE |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >2 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >20 | ▲ 84 | ▲ 480 | ▲ 645 |
| Chromium | ppm | ASTM D5185m >20 | <1 | 2 | 2 |
| Nickel | ppm | ASTM D5185m >20 | 0 | 4 | 5 |
| Titanium | ppm | ASTM D5185m | <1 | 16 | 11 |
| Silver | ppm | ASTM D5185m | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >20 | 5 | ● 235 | ● 261 |
| Lead | ppm | ASTM D5185m >20 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m >20 | <1 | 2 | 3 |
| Tin | ppm | ASTM D5185m >20 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | <1 | <1 | <1 |
| Cadmium | ppm | ASTM D5185m | 0 | <1 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 30 | 23 | 13 |
| Barium | ppm | ASTM D5185m | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 8 | 10 |
| Magnesium | ppm | ASTM D5185m | 0 | 96 | 153 |
| Calcium | ppm | ASTM D5185m | 0 | 123 | 130 |
| Phosphorus | ppm | ASTM D5185m | 289 | 330 | 274 |
| Zinc | ppm | ASTM D5185m | 0 | 2 | 0 |
| Sulfur | ppm | ASTM D5185m | 8906 | 9258 | 8380 |

CONTAMINANTS

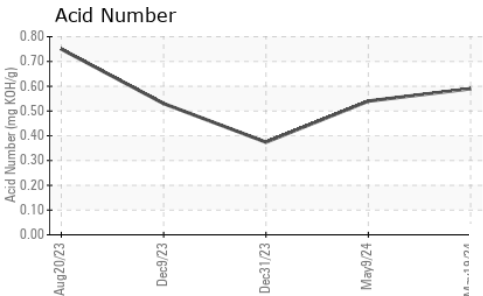
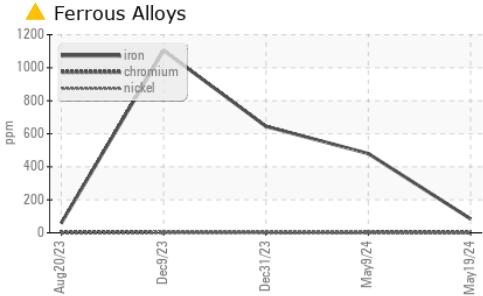
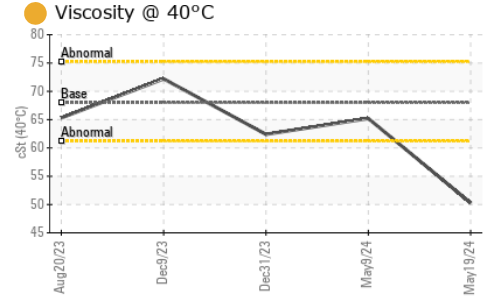
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 22 | ▲ 659 | ▲ 706 |
| Sodium | ppm | ASTM D5185m | 5 | 78 | 73 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 25 | 26 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.59 | 0.54 | 0.374 |



OIL ANALYSIS REPORT

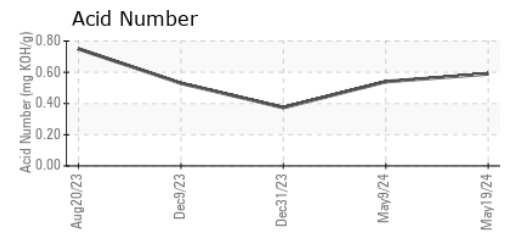
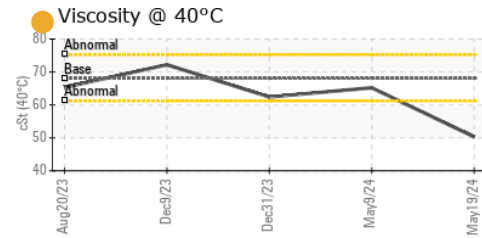
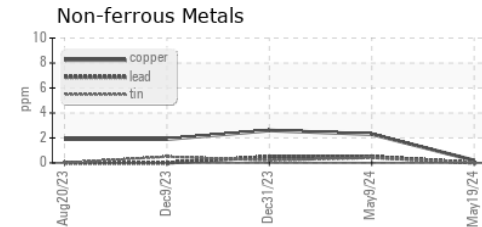
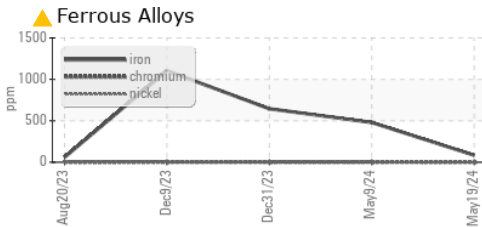


| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|---|---|
| White Metal | scalar | *Visual | NONE | ▲ MODER | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | ▲ MODER | ▲ MODER |
| Debris | scalar | *Visual | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 68 | ● 50.29 | 65.2 | 62.4 |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936858 **Received** : 17 May 2024
Lab Number : 06183027 **Tested** : 29 May 2024
Unique Number : 11034353 **Diagnosed** : 29 May 2024 - Jonathan Hester
Test Package : IND 2

3M - PITTSBORO
 4191 NC 87 S
 MONCURE, NC
 US 27559
 Contact: CHARLES JARRELL
 cjarrell@mmm.com

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)