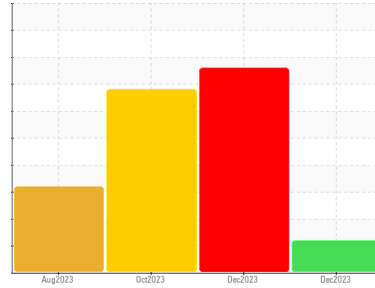




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



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

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

The iron level has decreased, but is still abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0882557 | WC0882544 | WC0853788 |
| Sample Date | Client Info | | 31 Dec 2023 | 09 Dec 2023 | 08 Oct 2023 |
| Machine Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | 64 | 236 | 290 |
| Oil Changed | Client Info | | Changed | N/A | Changed |
| Sample Status | | | ABNORMAL | 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 | ▲ 22 | 85 | 87 |
| Chromium | ppm | ASTM D5185m >20 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m >20 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 1 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >20 | 0 | 3 | 2 |
| Lead | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >20 | <1 | <1 | 2 |
| Tin | ppm | ASTM D5185m >20 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 26 | 25 | 27 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 2 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 3 | 0 |
| Calcium | ppm | ASTM D5185m | 4 | 9 | 0 |
| Phosphorus | ppm | ASTM D5185m | 331 | 305 | 266 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 8286 | 7656 | 6836 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | 7 | ▲ 34 | 12 |
| Sodium | ppm | ASTM D5185m | 2 | 2 | 2 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 1 | 0 |

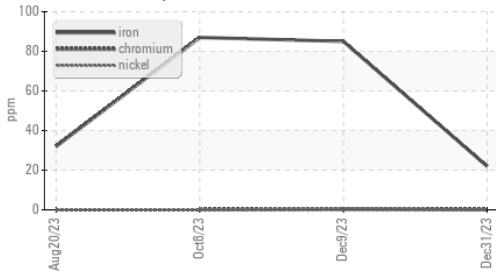
FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.59 | 0.66 | 0.73 |

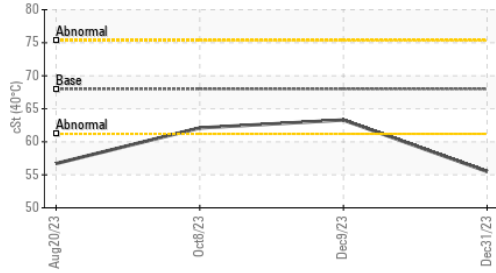


OIL ANALYSIS REPORT

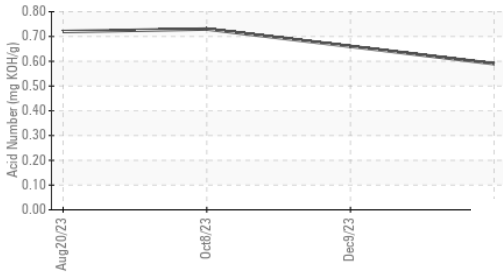
▲ Ferrous Alloys



▲ Viscosity @ 40°C



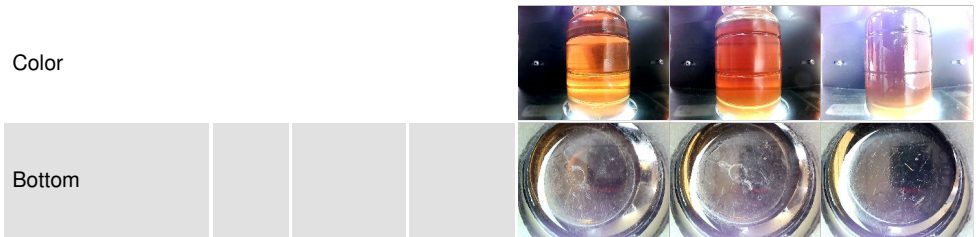
Acid Number



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | ▲ 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 |

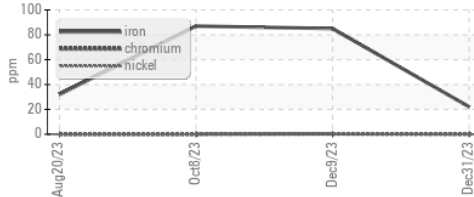
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 68 | ▲ 55.5 | 63.3 | 62.1 |

SAMPLE IMAGES

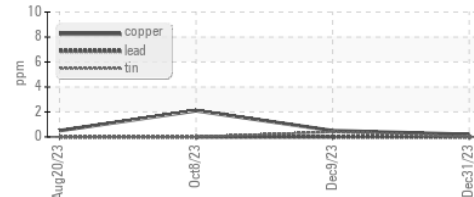


GRAPHS

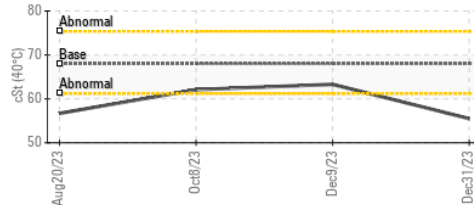
▲ Ferrous Alloys



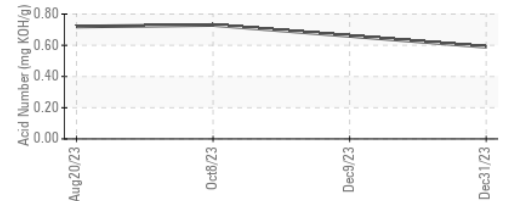
Non-ferrous Metals



▲ Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0882557 **Recieved** : 18 Jan 2024
Lab Number : 06064465 **Diagnosed** : 21 Jan 2024
Unique Number : 10835847 **Diagnostician** : Don Baldrige
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)

T:
F: