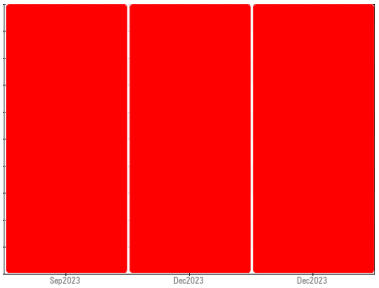
# PROBLEM SUMMARY

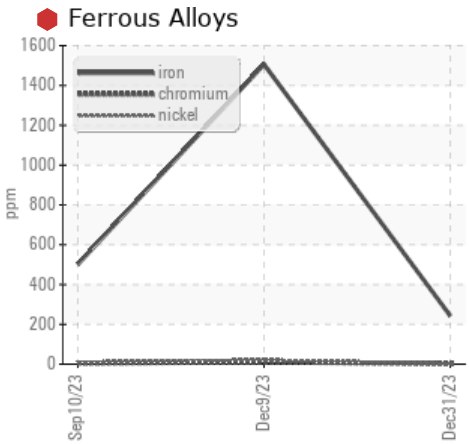
Area
**Building 12**
Machine Id
**Roll Crusher 2**
Component
**Southeast Bearing**
Fluid
**MOBIL MOBILGEAR 600 XP ISO 68 (3 GAL)**

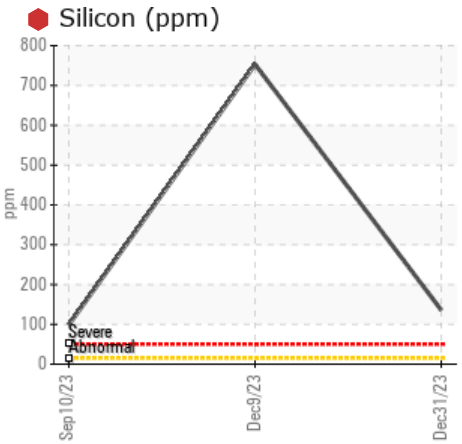
Sample Rating Trend

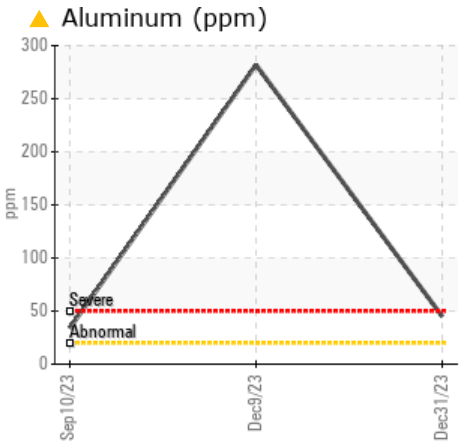



**WEAR**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | **SEVERE** | SEVERE | SEVERE |
| Iron | ppm | ASTM D5185m | >20 | **243** | 1506 | 502 |
| Silicon | ppm | ASTM D5185m | >15 | **136** | 753 | 99 |
| Silt | scalar | *Visual | NONE | **MODER** | MODER | LIGHT |


**Customer Id:** THRPIT
**Sample No.:** WC0882562
**Lab Number:** 06064466
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*To change component or sample information:*
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Inspect Wear Source | --- | --- | ? | We advise that you inspect for the source(s) of wear. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |
| Check Dirt Access | --- | --- | ? | We advise that you check all areas where dirt can enter the system. |

## HISTORICAL DIAGNOSIS

**09 Dec 2023 Diag: Angela Borella**

**WEAR**

We advise that you check all areas where dirt can enter the system. Check seals and/or filters for points of contaminant entry. Please confirm the lubricant listed in this report is the correct lubricant for replenishment of this system and is suggested by the OEM or overhaul facility. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.Bearing wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

**view report**

**10 Sep 2023 Diag: Don Baldridge**

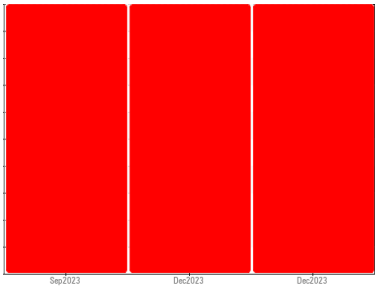
**WEAR**

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.The iron level is severe. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

**view report**

# OIL ANALYSIS REPORT

Sample Rating Trend




WEAR

Area
**Building 12**
Machine Id
**Roll Crusher 2**
Component
**Southeast Bearing**
Fluid
**MOBIL MOBILGEAR 600 XP ISO 68 (3 GAL)**

## DIAGNOSIS

**Recommendation**
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

**Wear**
The iron level has decreased, but is still severe.

**Contamination**
Moderate concentration of visible dirt/debris present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

**Fluid Condition**
The oil is no longer serviceable due to the presence of contaminants.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0882562** | WC0882547 | WC0853790 |
| Sample Date | | Client Info | | **31 Dec 2023** | 09 Dec 2023 | 10 Sep 2023 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **63** | 226 | 185 |
| Oil Changed | | Client Info | | **Changed** | N/A | Changed |
| Sample Status | | | | **SEVERE** | SEVERE | SEVERE |

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

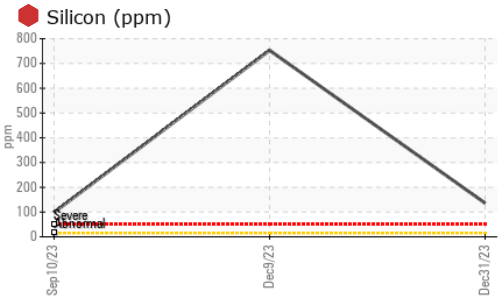
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **243** | 1506 | 502 |
| Chromium | ppm | ASTM D5185m | >20 | **1** | 10 | 4 |
| Nickel | ppm | ASTM D5185m | >20 | **3** | 21 | 10 |
| Titanium | ppm | ASTM D5185m | | **2** | 11 | 2 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | **45** | 282 | 34 |
| Lead | ppm | ASTM D5185m | >20 | **<1** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >20 | **1** | 7 | <1 |
| Tin | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | 0 |

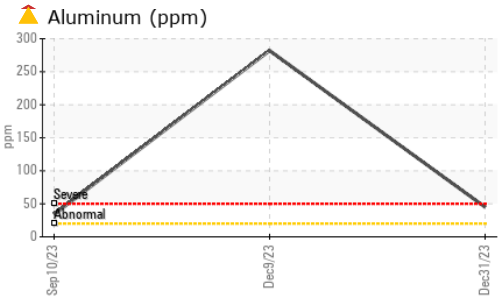
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **19** | 17 | 27 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **3** | 18 | 4 |
| Magnesium | ppm | ASTM D5185m | | **26** | 161 | 19 |
| Calcium | ppm | ASTM D5185m | | **25** | 116 | 16 |
| Phosphorus | ppm | ASTM D5185m | | **330** | 273 | 313 |
| Zinc | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | **8439** | 7429 | 9613 |

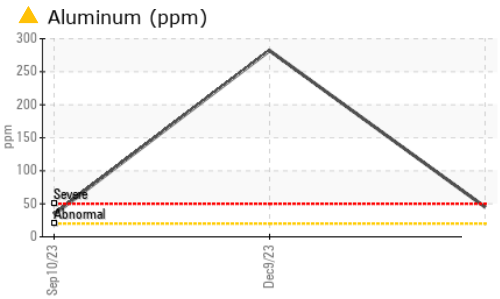
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >15 | **136** | 753 | 99 |
| Sodium | ppm | ASTM D5185m | | **14** | 82 | 13 |
| Potassium | ppm | ASTM D5185m | >20 | **5** | 30 | 2 |

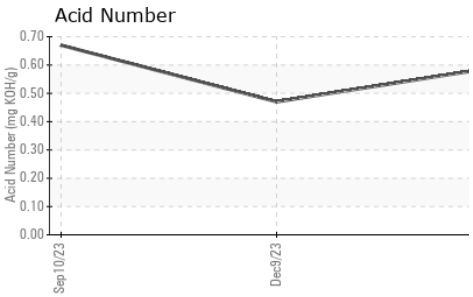
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.59** | 0.47 | 0.67 |

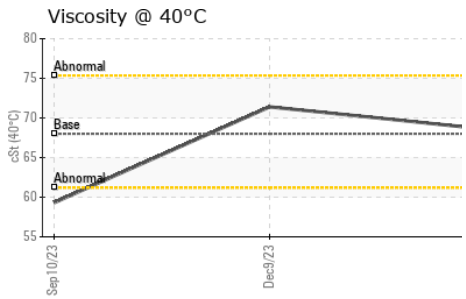
# OIL ANALYSIS REPORT



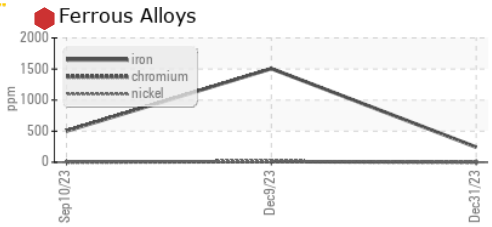



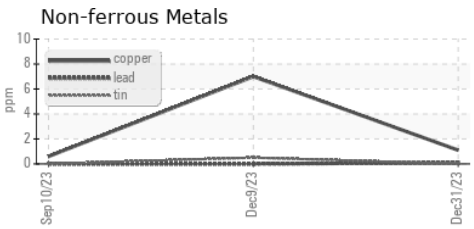

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | ▲ **MODER** | ▲ MODER | LIGHT |
| 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 | >2 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

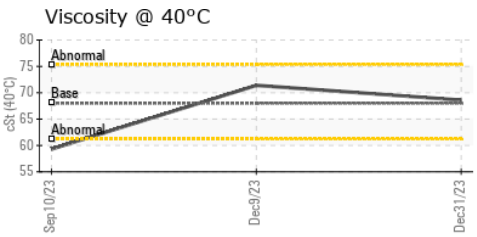
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 68 | **68.6** | 71.4 | 59.3 |

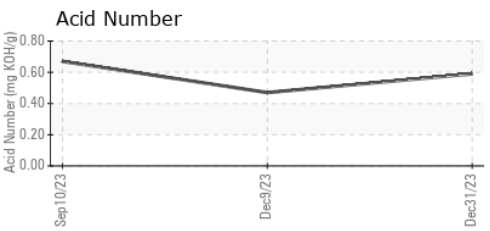
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0882562 **Recieved** : 18 Jan 2024
**Lab Number** : 06064466 **Diagnosed** : 21 Jan 2024
**Unique Number** : 10835848 **Diagnostician** : Don Baldridge
**Test Package** : IND 2

*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)*

**3M - PITTSBORO**
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F:

Report Id: THRPIT [WUSCAR] 06064466 (Generated: 01/21/2024 12:08:05) Rev: 1

Submitted By: JORDAN TUTEN