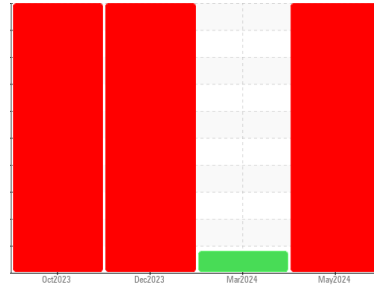




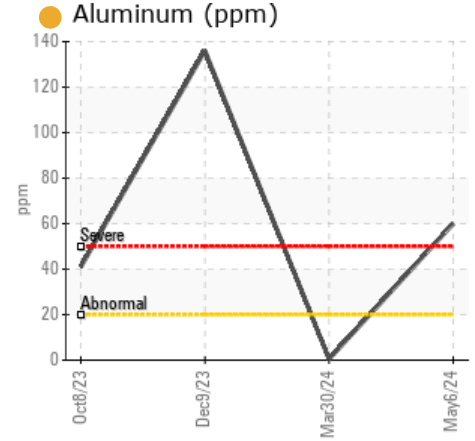
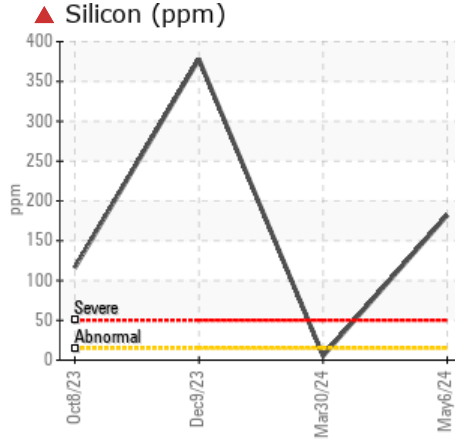
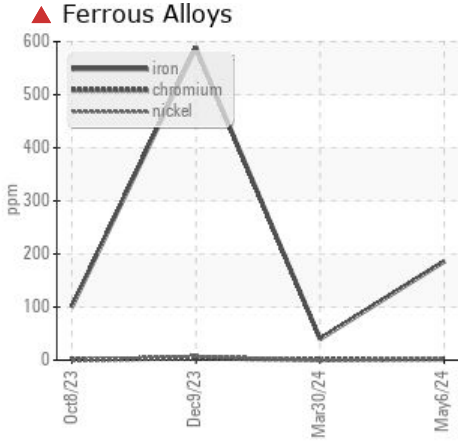
PROBLEM SUMMARY

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

Sample Rating Trend



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. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>20	▲ 186	▲ 40	▲ 589
Silicon	ppm	ASTM D5185m	>15	▲ 182	6	▲ 378
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE	▲ MODER

Customer Id: THRPIT
 Sample No.: WC0936867
 Lab Number: 06177801
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@wearchekusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

WEAR



30 Mar 2024 Diag: Don Baldrige

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level has decreased, but is still abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR



09 Dec 2023 Diag: Angela Borella

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 advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. The iron level is severe. All other component wear rates are normal. 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.



WEAR



08 Oct 2023 Diag: Don Baldrige

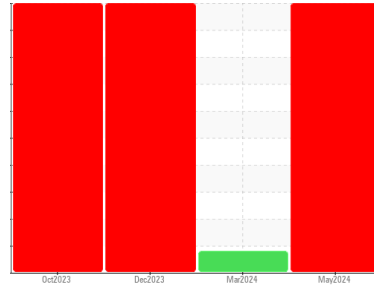
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
Building 12
 Machine Id
Roll Crusher 3
 Component
Northeast 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. Resample at the next service interval to monitor.

▲ Wear

Gear wear is indicated. Moderate concentration of visible metal present.

▲ Contamination

There is a moderate amount of visible silt present in the sample. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0936867	WC0901939	WC0882549
Sample Date	Client Info		06 May 2024	30 Mar 2024	09 Dec 2023
Machine Age	hrs	Client Info	2170	2170	2170
Oil Age	hrs	Client Info	2170	2170	224
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			SEVERE	ABNORMAL	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	▲ 186	▲ 40	▲ 589
Chromium	ppm	ASTM D5185m >20	2	0	4
Nickel	ppm	ASTM D5185m >20	4	0	8
Titanium	ppm	ASTM D5185m	5	0	8
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	● 60	<1	● 136
Lead	ppm	ASTM D5185m >20	<1	0	0
Copper	ppm	ASTM D5185m >20	<1	1	2
Tin	ppm	ASTM D5185m >20	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	26	33	15
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	2	<1	7
Magnesium	ppm	ASTM D5185m	23	0	51
Calcium	ppm	ASTM D5185m	32	<1	84
Phosphorus	ppm	ASTM D5185m	340	343	288
Zinc	ppm	ASTM D5185m	1	0	0
Sulfur	ppm	ASTM D5185m	9307	9282	7277

CONTAMINANTS

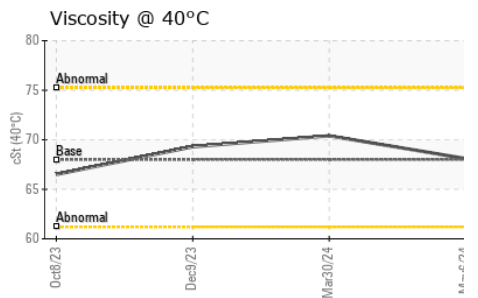
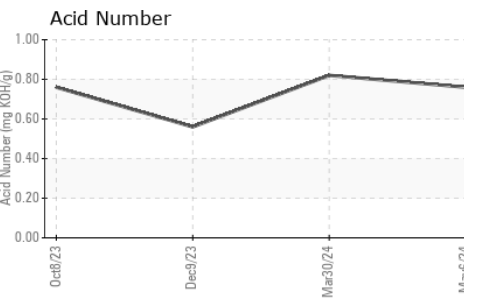
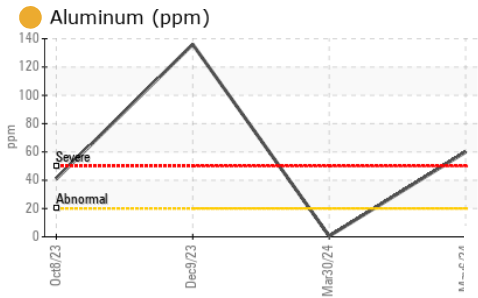
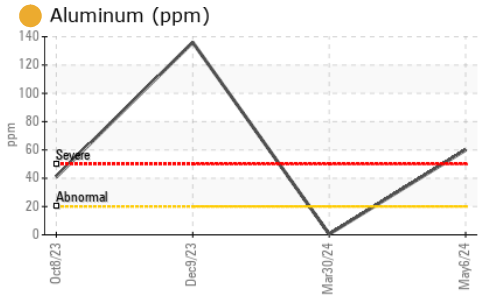
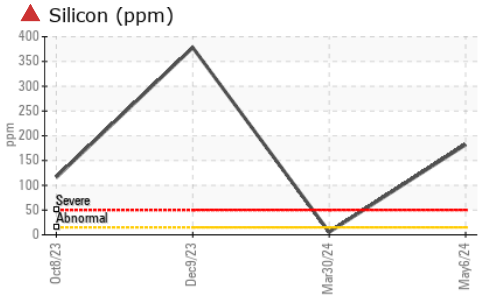
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	▲ 182	6	▲ 378
Sodium	ppm	ASTM D5185m	20	<1	48
Potassium	ppm	ASTM D5185m >20	8	0	11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.76	0.82	0.56



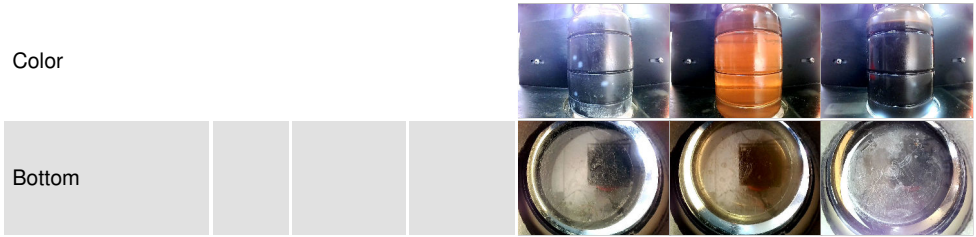
OIL ANALYSIS REPORT



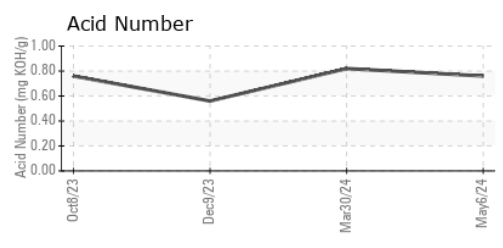
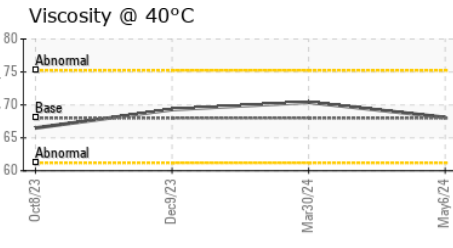
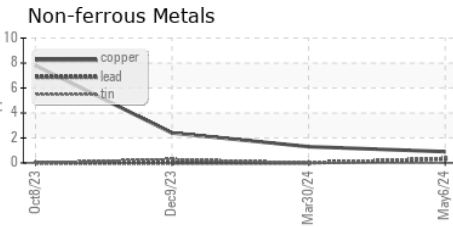
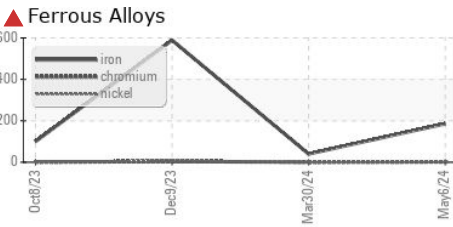
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	68.1	70.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936867 **Received** : 13 May 2024
Lab Number : 06177801 **Tested** : 14 May 2024
Unique Number : 11029127 **Diagnosed** : 15 May 2024 - Angela Borella
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)